

JPRS-TEN-95-002

22 February 1995



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JPRS Report

Environmental Issues

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Environmental Issues

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CONTENTS

22 February 1995

INTERNATIONAL

Commentary Analyzes Uruguay Round's Effects on Trade	1
Consultants Sought To Monitor Endangered Species Treaty	1
Tokyo, London To Hold Talks on Environmental Policy	2

AFRICA

REGIONAL AFFAIRS

Roundup of Environmental Reports	3
--	---

SOUTH AFRICA

Four Species of Orange River Fish Declared Endangered	4
Fund for Developing Ecotourism 'Failure'	4
ANC Calls for National Conference on Environmental Policy	5

CHINA

China To Strengthen Punishment for Environmental Crime	6
Fujian Province Takes Steps To Protect Farmland	6
Scientists To Check Air Pollution in PRC	6
Government Considers 'Environmental Tax' on Pollution	6
Fujian Province's Afforestation Program Proves Successful	7
Nation To Increase Funds for Environmental Protection	7
Chen Junsheng Urges More Efforts To Protect Environment	7
CAS Scientists Develop Successful Method To Control Sand	8
Beijing To Curb Acid Rain	8
National Forestry Meeting Ends in Hefei	9
Progress Seen in Waste Water Recycling	9
More Efforts To Protect Farmland, Environment Urged	10
Government To Intensify Efforts To Fight Desertification	10
Protection of Water Resources To Be Stepped Up	10
Tibet Protects Environment With Legal Force	11
Column Urges Effort To Combat Acid Rain	11
Eleven State Departments To Sponsor Annual Environment Drive	11

EAST ASIA

AUSTRALIA

Editorial Questions Viability of Proposed Carbon Tax	13
--	----

JAPAN

Talks Set With Russia on Nuclear Waste, Weapons Dismantling	13
Forestry Agency To Work To Develop Wood-Based Chemicals	14
Scientists To Work With Russians on Radiation Data	14
Panel Calls For New Look at Environmental Preservation	14
'Substantial Number' of Conservation Violations Noted	15

NORTH KOREA

Dialogue Denounces South's Nuke Dumping Site Construction	15
KCNA Reports Rally Held To Protest Nuclear Waste Dump Site	16
CPRF Secretariat Denounces ROK Plans for Nuclear Dump	17

SOUTH KOREA

Environment Minister Proposes Three-Way Consultative Body	17
---	----

TAIWAN

Premier Reaffirms Support for Environmental Protection	17
Tiger Conservation Campaign Kicks Off	18
Taipei, EU Officials Discuss Trade in Waste Materials	18

THAILAND

Mekong Development Blueprint Previewed	18
Ten Logging Companies Withdraw From Cambodia	19
Cambodian Minister Clarifies Deforestation Charges	20

EAST EUROPE

CZECH REPUBLIC

Local Official: CEZ Not To Build Fuel Depository in Temelin	21
---	----

HUNGARY

Atomic Power Station Seeks Nuclear Waste Storage	21
--	----

ROMANIA

Article Claims Northern Rivers 'Excessively' Polluted	21
---	----

SLOVAKIA

Mochovce Construction To Go Ahead Even Without EBRD Loan	21
--	----

LATIN AMERICA

REGIONAL AFFAIRS

Southern Cone Environmental Issues	23
--	----

BARBADOS

Marine Biologist Urges Governments To Restrict Fishing	23
--	----

CHILE

Illegal Hunting of Sea Lions Reported	24
Figures on Native Forests Analyzed	24

ECUADOR

Biodiversity Master Plan Receives \$10 Million	25
--	----

NICARAGUA

Environment Projects Completed in 1994	25
--	----

PERU

National Environmental Council Created To Coordinate Policy	26
---	----

TRINIDAD & TOBAGO

Editorial Expresses Qualms About Environmental Agency	27
Foreign Minister Protests Planned Nuclear Waste Shipment	27

NEAR EAST/SOUTH ASIA

INDIA

Tax Lifted on Devices To Phase Out Ozone Depleting Matter	28
---	----

IRAN

Manafi on EPO's Plans To Cut Pollution	28
--	----

CENTRAL EURASIA

RUSSIA

Nuclear Subs Awaiting Scrapping Pose Ecological Threat	29
Security Lacking at Nuclear Weapons Depots	30
Russia Seen As Not Ready to Comply With Basel Convention	31
Symposium on Nuclear Contamination Opens in Chelyabinsk	32
Urals Radiation 'Unique Research' Results To Be Revealed	33
Assessment of Ground Water Pollution by Petroleum Products in the Vicinity of an Abandoned USSR Air Force Airfield (Brzeg, Poland)	33
Environmental Minister on Oil Fires in Grozny	36
Yablokov on Ecological, Health Dangers in Chechnya	36
Official Discusses Preventing Environmental Accident	36
Environmental Damage in Chechnya Discussed	36
Three Years Left Before Plutonium Escapes From Komsomolets	37
Greenpeace Criticizes Antarctic Base 'Dumping Ground'	38
Sweden To Help Scrap Russian Chemical Weapons	38

AZERBAIJAN

Caspian Sea Pollution, Other Problems Viewed	38
--	----

ESTONIA

Purifying of Liquid Radioactive Waste Begins in Paldiski	40
--	----

KAZAKHSTAN

Atyrau Oblast Termed Ecological Disaster Area	40
---	----

LATVIA

Environmental Protection Memorandum Signed With Finland	43
---	----

LITHUANIA

Environmental Protection Agreement Drafted With Belarus	43
Agreement on Environmental Protection Prepared With Belarus	43

UKRAINE

Reorganization of Ministries Viewed	44
UNESCO-Chernobyl Program Meeting Ends in Paris	45
Decree on Environment, Nuclear Security Ministry	45
Firm Proposes 'Ecologically Friendly' Chernobyl Replacement	45
Ecological Experts Approve Odessa Oil Terminal Construction	46
Parliament Approves Construction of Odessa Oil Terminal	46

WEST EUROPE

REGIONAL AFFAIRS

Bjerregaard Gets Reluctant Parliamentary Approval	47
Bjerregaard Defines Future EU Environmental Policy	47
Danes, Dutch, Germans Sign North Sea Coast Pact	47

AUSTRIA

Foreign Minister Mock Views Future in EU	48
Minister Rejects EBRD Support for Slovak Nuclear Plant	49
Vranitzky, Klestil Appeal to Slovakia Over Mochovce	49

DENMARK

Minister Vows Continued Fight Against CO ₂ Emissions	50
Expanded Recycling Effort Announced	51
Minister Sets Out Ground Water Cleanup Effort	51
Only Third of Lakes Meet EU Purity Standards	52
EU Expected To Demand Lakes Cleaned Up	52

FINLAND

Environment Policy Impact From Joining EU Aired	54
Finland Sees Russian Fees, Taxes Threat to Environmental Aid	56

GERMANY

Expert Views Goals of Berlin Climate Summit	56
Schroeder, Rexrodt Agree on Energy Talks in February	58
Environment Minister Favors Introduction of Energy Tax	58

Commentary Analyzes Uruguay Round's Effects on Trade

AU1001130995 Frankfurt/Main FRANKFURTER
ALLGEMEINE in German 10 Jan 95 p 9

[Commentary by Michael Stabenow: "Europe in World Trade"]

[FBIS Translated Text] Brussels—The European Union is growing—but the economic importance of other regions in the world may grow more quickly. Prognosticators think that in about 10 years states like China and India might contribute more to economic performance than Europe. Such predictions reflect the scope of change that will probably come about in world trade over the next few years.

At the moment it is still difficult to predict the effect of the GATT Uruguay round. If classic import barriers, such as customs duties and technical regulations, lose their importance as a result of the opening up of markets, the importance of other aspects for the international division of labor might grow. A foretaste is provided by the discussion of clauses on environmental, social, and human rights affairs. The policy for subsidies and the development of the exchange rates could also become more important as parameters for world trade.

One may complain that the steps of liberalization taken by the Uruguay round are too hesitant. In its latest annual report the Expert Council pointed to many defects: the possibility of restricting quantity in the event of a disproportionate increase in imports or of dumping, continuing customs and import quotas in agricultural trade, and also insufficient liberalization in the service sector. However, the GATT signatories would hardly support the results of the Uruguay round if they did not expect an improvement in their prosperity from them.

At first glance, the opening up of the market will probably change the competitive positions to the benefit of countries with low labor costs. The European Commission estimates, for instance, that two-thirds of the remaining 3 million jobs in the European textile industry might move to low-wage countries. It need not be a disadvantage for Western Europe if low wage levels in labor-intensive industrial sectors reduce import prices, while, on the other hand, Western Europe's prosperity is increasingly based on capital-intensive products with qualified labor. Trade promotes consumption and import barriers brake both.

However, a theoretical consideration of this matter must also take the social conditions in low-wage countries into account. The GATT rules already permit trade restrictions on products that are manufactured in prisons. In view of many reports about child labor and forced labor, the demand made by the U.S. Administration and several EU partners to link trade privileges with the observation of social principles sounds definitely tempting. The principles concerning freedom of assembly, the right to wage negotiations, or equal treatment of men and women on pay, which were agreed on in the international Labor Organization and have been ratified by more than 100 states, are certainly legitimate.

However, it is not only in the developing countries that there are fears that social, human rights, and environmental

clauses might be used as a pretense to restrict trade. This also applies to the Commission's intention to link trade privileges to the observation of international standards. Therefore, critics say that it is trade that permits prosperity and favors the mutual dependence of national economies, which is decisive for political stability. And can the increasing ecological problems be mastered with more or with less prosperity? At the same time, however, it cannot be ignored that not only poverty but also the neglect of basic rights have an effect on the pressure of immigration on the industrial countries.

So far, the discussion of social clauses has not been made the express task of the future World Trade Organization (WTO). However, the controversial issue will remain on the agenda. On the other hand, the ecological clauses are right at the top of the WTO's work program. If they are based on international agreements, such as the Washington biodiversity treaty, the suspicion will probably not arise—because of the required unanimous decisions—that trade barriers are to be decorated with an ecological cover.

But what about unilateral decisions, such as the U.S. import ban on canned tuna fish, which was imposed in 1991? Because Mexican fishermen also let dolphins get caught in their nets, Washington not only stopped the import of canned tuna fish from Mexico, but also from Spain, which bought tuna fish from Mexico. The helplessness of the GATT Secretariat at that time showed the inadequacy of the usual arbitration procedures. The planned more binding settlement procedures in the WTO might offer better prospects.

The planned legal corset for world trade is giving rise to hopes. However, in the event of considerable doubt about the WTO's authority, it could hardly stand the strain. It is not promising when the Americans want to reserve the right to interpret WTO decisions on their own and, in addition, will also be able to impose unilateral restrictions in the future on the basis of Article 301 of their trade law.

Competition and subsidy policy also remain in a vacuum, because they have been completely or partly excluded from the Uruguay round. The fact that no binding code for subsidies has been negotiated might backfire. The transatlantic quarrel about subsidies for Europe's Airbus is still an unpleasant memory. The trend toward increasingly comprehensive free trade zones and regional economic communities—also in Asia or Latin America—is also a test for the new trade system. They could undermine the multilateral rules of the Uruguay round. But have the West Europeans not impressively shown how free trade and economic integration can contribute to the safeguarding of peace, democracy, and political stability?

Consultants Sought To Monitor Endangered Species Treaty

OW1001092095 Tokyo KYODO in English 0811 GMT
10 Jan 95

[FBIS Transcribed Text] Tokyo, Jan. 10 KYODO—The secretariat of CITES, the world's largest conservation treaty, is seeking support from private consulting companies in member nations to monitor compliance with the treaty, environment agency officials said Tuesday [10 January].

The agency has urged interested Japanese companies and institutions to contact the Geneva-based secretariat of the 1973 Convention on International Trade in Endangered Species (CITES).

The plan to let private companies assess the effectivity of the treaty's conservation measures as well as propose improvements was adopted at the last CITES meeting in Fort Lauderdale in Florida in November 1994.

The third party consultants are asked to point out cases where the treaty contributed to preserving or improving the habitat of an endangered animal or plant, and to cite cases where trade bans and restrictions failed.

They are also expected to analyze difficulties in implementing the treaty as well as measures that have to be taken in each of the 126 countries that are parties to CITES.

The results are to be submitted to the next CITES meeting in Zimbabwe in 1997.

Survey proposals including details about the number of participants and projected costs have to be sent to the secretariat by the end of this month.

The treaty's standing committee, which is currently presided over by Japan, will select the consultant bodies, which will be paid a maximum honorarium of 200,000 Swiss francs (about 15.6 million yen) at a meeting in March.

Japanese companies might, however, have problems in meeting the requirements since all participants including biologists, economic and legal experts must have conversational ability in English, French and Spanish.

Tokyo, London To Hold Talks on Environmental Policy

*OW1301130595 Tokyo KYODO in English
1222 GMT 13 Jan 95*

[FBI's Transcribed Text] Tokyo, Jan. 13 KYODO—Japan and Britain will hold consultations on environmental policy in Tokyo on Tuesday [17 January], the first such talks between the two countries, the Foreign Ministry said Friday.

The consultations follow a bilateral agreement signed last year, which calls for cooperation in resolving environmental issues, the ministry said.

Participants will include Kojiro Takano, director general of the ministry's multilateral cooperation department, and Robin Sharp, director in charge of the global environment at the British Environment Department, it said.

Japan has held similar bilateral talks with the United States and the European Union.

REGIONAL AFFAIRS

Roundup of Environmental Reports

AB2201172095

[FBIS Editorial Report] The following is a roundup of recent environmental reports monitored from media in FBIS Abidjan Bureau and EAU coverage areas from 20 December 1994 to 20 January 1995. Source information follows in parentheses after each item.

Nigeria

Kaduna Radio Nigeria in English at 1700 GMT on 20 December reports that the Federal Environmental Protection Agency has warned importers to desist from the importation of toxic and hazardous waste into the country. The director general of the agency, Dr. Evans Aion, who gave the warning at a news briefing in Abuja, said despite international efforts in the control of toxic waste, there were still massive shipments of waste to developing nations. Dr. Aion said between September and December this year, the agency intercepted more than 97 metric tons of banned chemicals and waste camouflaged as raw industrial materials and products. He stated that the latest methods employed by unscrupulous importers was to disguise toxic chemicals and waste as raw materials under various labels. He advised importers to channel their requests for the importation of hazardous and (?restricted) chemicals to the agency for approval or face the consequences. On waste management, the agency will soon come out with a blueprint on recycling of waste, collection, and disposal, among others.

Lagos NTA Television Network in English at 2000 GMT on 22 December reports that the Federal Environment Protection Agency, FEPA, has developed a university linkage program to ensure effective participation of the universities in environmental projects. The director general of the agency, Dr. Evans Aion, gave details of the program at a news briefing in Abuja. He said that under the program, six universities had been identified as focal points to deal with issues relating to fresh water resources and climate change, desertification and drought control, forest conservation, and biodiversity. Others are gully erosion research, hazardous waste management, and clean production technology as well as capacity building and human resources development in environmental management. The second area is a donor-assisted capacity building program which comprises the World Bank-assisted environmental management projects on institutional strengthening and capacity building as well as environmental data bank and studies components. The third area is focus on mobilizing internal resources for staff training and development. Dr. Aion also announced the designation of FEPA as the representative of the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

Lagos NTA Television Network in English at 2000 GMT on 20 January reports that "a major oil spillage has occurred in the Bomadi and Burutu areas of Delta State." NTA Benin Correspondent Benebi Eselemo reports that at the time NTA News visited the areas, the long rubber apparatus being used for mopping up operation was still in position. "Investigations reveal that the havoc was caused by a burst

pipeline belonging to the AGIP Oil Company. At Odimodi, the community chairman, Mr. Bethlehem Ingo, said the youths organized themselves and separated the crude oil from the water in the hand-dug wells while they dug additional ones when the level of the water eventually dropped." In a similar incident which occurred in the neighboring Bomadi Local Government Area, economic trees and food crops were destroyed. The spillage, which occurred through a leakage of the block valve station of a high pressure pipeline near Bomadi, belongs to Shell Petroleum Development Company. Mostly affected by the spillage were palm trees and cassava farms of both sides of the pipeline which conveyed crude oil from two major oil flow stations, Beniseida and Opukushe, to the Ughelli Quality Control Center for onward transmission to the Fokado Stand Farm.

Tanzania

Dar es Salaam Radio Tanzania External Service in English at 1600 GMT on 9 January reports President Ali Hassan Mwinyi has called upon the lovers of wildlife and environmental conservation in the world to cooperate with Tanzania in the maintenance and publicity of the country's natural heritage.

President Mwinyi made this appeal today at State House during his talks with Edith Blinkers of the Savage Paradise Foundation, a Netherlands-based wildlife conservation nongovernmental organization. The president appreciated Blinkers' intention to make a film on wildlife in Tanzania. He admitted that Tanzania had not been aggressive enough in making known to the rest of the world our wildlife treasurers and thus urged friends of Tanzania to do everything to assist in this endeavour.

Dar es Salaam Radio Tanzania Network in Swahili at 1700 GMT on 13 January reports the police in Lindi Region have seized ivory tusks worth over 16 million shillings, or \$30,000, which were in transit from Liwale to Dar es Salaam. The police commander of the Lindi Region Ndugu (Imani Iluni) said a resident of Dar es Salaam was suspected of being involved in the theft of the ivory. He has been arrested and was expected to be charged today for possession of government assets (?without a permit). According to the police commander the suspect was found with 12 ivory tusks weighing 13.5 kg hidden in a bundle of clothes.

Uganda

Kampala Radio Uganda Network in English at 1700 GMT on 20 January report the four countries of Tanzania, Kenya, Rwanda and Uganda have agreed on the release of weevils into the waters of Lake Victoria and the Kagera system to feed on the water hyacinths. The statement from the commissioner for fisheries in the Ministry of Agriculture, Animal Industry and Fisheries says the agreement to release the weevils follows the positive outcome of the host (?specifist) tests carried out by both Kenya and Uganda. According to the statement, the host (?specifist) tests have shown that the water hyacinth weevils cannot feed on other plants but they do extensive damage on the water hyacinths.

The tests were conducted jointly by the Kenya Agricultural Research Institute and the Uganda National Agricultural

Research Organizations, NARO, with assistance from FAO. The weevil species to be released are (*Nikotina yukoloria*) and (*Nikotina bruchin*).

Zaire

Dakar PANA in English at 1453 GMT on 9 January reports Zaire's minister of environment, nature conservation and tourism, Ruhana Mirindi, has expressed concern about the depletion of vegetation around urban centers in south-eastern Shaba Province, Kasai and in Kinshasa.

In a document issued in the Zairian capital, the minister accused timber firms of depleting Mayombe forest in lower Zaire. He said the burning of forests for agriculture and shifting cultivation had also created conditions for desertification.

"The protection of the environment, forestry ecosystems and trees, in particular, is now a major concern for mankind at a global level", he said. According to him, Zairian forests which contain the largest biological diversity in the world, "contribute to maintaining earth balances and in the atmosphere, specially with regard to climatic changes", he added. Thus Zaire has a role to play in this planetary inter-dependence, the minister said.

According to him, if each Zairian child planted a tree and maintained it, the entire planet would be protected from the natural disasters now facing many countries. He stressed the important role of trees in drug manufacturing, traditional medicine, cloth-making and food. He added that forests, which produce 65 percent of biomass in the world and renew two thirds of the oxygen on earth, are the main source for human life.

SOUTH AFRICA

Four Species of Orange River Fish Declared Endangered

MB1601180895 Johannesburg SAPA in English
1741 GMT 16 Jan 95

[FBIS Transcribed Text] Kimberley Jan 16 SAPA—Four species of fish in the Orange River system are to be declared endangered and one protected, Northern Cape Agriculture and Nature Conservation MEC [Member of the Executive Council] Mr J S Marais announced on Monday [16 January].

The four endangered species are the namaqua minnow, the rock catfish, the three-spot minnow and the mud mullet. The protected species is the large-mouth yellowfish. Angling regulations will be amended.

A statement by Mr Marais said an environmental management strategy for the river in the Northern Cape was crucial because of its importance as a natural resource.

Flow patterns in the Orange River system had changed because of river regulation and catchment use and water quality had deteriorated, particularly that from the Vaal River system, with an increase in salinity and a drop in oxygen levels. The over-extended Vaal River system no longer contributed to the Orange except in times of flood.

Other problems highlighted in a study were river weed and water reed encroachment, silting, red-billed quelea infestation, riverbed degradation and riverbank destabilisation. Flow management based on various studies had been noted.

Mr Marais said there was a need for a national and an international approach to conservation of the Orange River that should include conservation bodies and state authorities in Namibia and Lesotho.

Fund for Developing Ecotourism 'Failure'

MB1601133595 Johannesburg BUSINESS DAY
in English 16 Jan 95 pp 1, 2

[Report by Amanda Vermeulen]

[FBIS Transcribed Text] The Industrial Development Corporation's (IDC) R [rands]600m [million] pool to fund eco-tourism development has been a failure, tourism consultants said at the weekend.

The fund, established in May 1992, has to date allocated only R65m for 14 projects from a total of 33 applications for R257m.

An IDC spokesman said that the unsuccessful applicants had failed to meet IDC criteria. The scheme required that they provide at least 40 percent of the investment required for individual projects.

Loans were provided only to those projects that developed, improved or expanded tourist accommodation in the larger private reserves and in areas adjacent to or under the control of the relevant conservation authorities.

The IDC spokesman said loan facilities were "tailored to the cash flow of the project and interest rates are in line with capital market rates".

However, various tourism consultants have said the terms were too stringent, thus defeating the scheme's object.

Kessel Feinstein Consulting director Gillian Saunders said the loans were not soft enough to attract prospective developers, who in many cases were unable to raise the capital through the traditional lending institutions.

"Many small and medium-size enterprises need a kick start to get them going, as well as favourable loan facilities to tide them over the generally unprofitable introductory period when the business is being established."

Price Waterhouse Meyernel's Hospitality Group coordinator John Awbrey said the IDC had not advertised the scheme sufficiently to the general public, leaving most potential entrepreneurs ignorant of the funding facilities.

In addition the criteria regarding location was limiting, which further reduced the number of potential applicants.

The IDC spokesman said one of the reasons more loans had not been granted was the uncertainty over the future of the national and regional nature reserves, and future legislation governing them.

Potential investors were reluctant to commit to any projects until this matter had been resolved.

However, he said the expected improvement in domestic and foreign tourist numbers should have a beneficial effect

on the body's general tourism scheme, established in 1993. Of a fund of between R100m and R200m, 17 projects to the value of R26m had been approved.

ANC Calls for National Conference on Environmental Policy

*MB2201170095 Johannesburg Radio South Africa
Network in English 1600 GMT 22 Jan 95*

[FBIS Transcribed Text] The ANC has called on Environmental Affairs Minister Dawie de Villiers to convene a

national conference to discuss environmental policy issues and priorities in South Africa. The ANC environment spokesman, Thamie Sukuthu, said few changes had taken place in the government's environmental policy and its priorities. He said the budget remained dominated by wildlife concerns and very little money had been allocated to issues like environmental education. The proposed conference would address issues such as the import and export of toxic waste and an integrated approach to pollution control leading to the formulation of a national environmental strategy.

China To Strengthen Punishment for Environmental Crime*HK0601125095 Hong Kong AFP in English
1158 GMT 6 Jan 95*

[FBIS Transcribed Text] Beijing, Jan 6 (AFP)—Blind pursuit of economic growth by local authorities has taken a serious toll on China's forests and wildlife, officials said Friday in pledging to strengthen punishment for environmental crimes.

Vice Minister of Forestry Shen Maocheng said some local governments had failed to give adequate protection to their forests or wildlife, while others had sought economic development at the expense of their environmental resources.

Shen said China would speed up revising or creating laws to ensure harsh punishment of those destroying forests and killing protected wildlife, saying the penalties in existing laws were "much too mild for what the law-breakers deserve."

State Councillor Chen Junsheng acknowledged that the growing demand for timber and wildlife products caused by the country's rapidly growing economy and the rising standards of living had made it difficult to protect limited resources.

Fujian Province Takes Steps To Protect Farmland*OW0501164295 Beijing XINHUA in English
1610 GMT 5 Jan 95*

[FBIS Transcribed Text] Fuzhou, January 5 (XINHUA)—East China's Fujian Province is making special efforts to achieve a target of conserving one million ha of basic farmland—up from 0.99 million ha last year.

At present, the per-capita amount of cultivated land in the province is only some 0.04 ha, the lowest in the whole country. In order to accomplish the strategic task of making its 31-million population self-sufficient in grain, Fujian's government announced a regulation last September that stipulated that 82 percent of the farmland must be preserved as what it calls basic farmland, i.e. arable land which must be used only for agricultural purposes.

In the latter half of 1994 the provincial administration allocated a total of nearly 20 million yuan to conserve farmland.

According to official calculations, one million mu of farmland can produce between 7.35 billion kg and eight billion kg of grain, ensuring that the per-capita grain amount reaches 250 kg to 300 kg.

In addition, such an area of cultivated land could provide an average of two to three Li (one Li equals 0.7 sq m) of vegetable-growing land for each of the province's 5.4 million urban residents, ensuring a sufficiency of vegetables. In the coastal city of Xiamen alone, 1,270 ha of vegetable land has been protected by enclosure, which is expected to provide nearly 500,000 kg vegetables a day.

Meanwhile, the establishment of clear-cut areas of farmland will assist the development of land for industrial and other purposes, according to provincial officials.

Scientists To Check Air Pollution in PRC*OW0901045095 Tokyo KYODO in English
0433 GMT 9 Jan 95*

[FBIS Transcribed Text] Tsu, Japan, Jan. 9 KYODO—Japanese and Chinese scientists will launch a joint one-year probe on air pollution in Shenyang, China, a center of heavy industry in northeastern Liaoning Province, to assess its impact on local residents, a Japanese member of the team said Monday [9 January].

Shenyang is a major center for steel and heavy machinery production and has high levels of air pollutants such as sulphur oxides and nitrogen oxides, according to Toru Yamauchi, a professor at the Medical Department of Mie University in Tsu, Mie Prefecture, western Japan. Rapid economic development, which has compounded environmental problems over the last decade, is expected to continue in the coming years, making it difficult to rein in pollution, he said.

A probe in 1989 found that the amount of floating dust particles in Shenyang exceeded Japanese environmental standards five times, with sulphur oxide concentration being 1.3 times higher than the Japanese ceiling. Given China's booming economy, air pollution is believed to have grown worse since the probe five years ago.

Yamauchi's team will cooperate with scientists from the Chinese medical university and the Shenyang Medical Institute. Yamauchi, who participated in two previous surveys in Shenyang, said the city's factories produce a high amount of emissions because they still use equipment dating back to the 1930s. Upgrading the plants with modern filter technology has also proven difficult, he said.

For the probe, the scientists will install some 30 glass tubes with air filters at elementary schools across the city. The filters will be replaced every 15 days and sent to Mie University where residues will be analyzed. Yamauchi said.

Yamauchi said, "I think the pollution there is worse than during peak times in Yokkaichi," a city in Mie Prefecture with industrial pollution and related health problems. "The air pollution seriously impacts local residents because industrial areas are dotted with residential districts," he added.

The researchers hope that the probe will provide more data about the scope of the problem and on links between air pollution and diseases of the respiratory system common among Shenyang residents, he said.

Government Considers 'Environmental Tax' on Pollution*HK0801085495 Beijing CHINA DAILY in English
7 Jan 95 p 1*

[By Zhu Baoxia: "Nation Eyes Tax To Save Habitat"]

[FBIS Transcribed Text] The government is considering an "environmental tax" as an economic weapon aimed mainly at combating the worsening industrial pollution in the country, according to the top administrator of National Environmental Protection Agency (NEPA).

Harsher economic punishment would help guarantee adherence to environmental laws and regulations, Xie Zhenhua said yesterday at a national conference on environmental protection in Beijing.

Under a five-year programme (1996-2000), NEPA plans to improve its system of imposing fines on factories for waste discharge, by requiring payments from any company that discharges untreated waste.

Currently, only firms that discharge excessive amounts of waste into the surroundings are fined.

Taxes are also envisaged for economic activities that could harm the ecological system and for products that could impair the environment.

The fees and taxes would be used for major pollution control projects across the country.

The measures are designed to guarantee a cleaner environment for the coming century, Xie said.

The outline for the programme being discussed at the two-day meeting, also suggests that governments at all levels increase spending for environmental protection projects and carry out publicity campaigns to arouse public awareness of the issue.

NEPA data show that despite achievements in environmental protection during the past decade, the quality of the country's environment has been deteriorating. Air and water both have become more severely contaminated.

Beijing, Shenyang, Xian, Shanghai, and Guangzhou are among the 10 cities in the world with the most serious air pollution, said Xie.

Acid rain caused by excessive discharge of sulphur dioxide has expanded to 29 percent of the country's land territory.

About half of the country's seven major river systems are contaminated.

NEPA is intensely studying the environmental situation and will work out countermeasures to deal with the problems this year, Xie said.

This year's environmental protection work will focus on tightening up legislation, monitoring law enforcement, and mapping out the Nationwide Green Programme.

Revised air and water pollution control laws are expected to be promulgated by the National People's Congress and put into effect this year.

NEPA, the government's environmental watchdog, will also start to revise the State Environmental Protection Law and draft laws on solid waste and noise control this year.

Fujian Province's Afforestation Program Proves Successful

*OW0701055795 Beijing XINHUA in English
0315 GMT 7 Jan 95*

[FBIS Transcribed Text] Fuzhou, January 7 (XINHUA)—After years of efforts, coastal Fujian Province has planted trees on almost 52 percent of its land area, and in doing so becoming first in forest coverage in China.

For the past 10 years, the province has created a total of 862,500 hectares of forests, increasing timber reserves by 58.43 million cubic meters, the latest statistics show.

The first phase of a coastal tree belt, some 3,300 kilometers in length, has been completed.

Legislation has been instrumental in the province's afforestation drive, provincial authorities said. After the promulgation of China's "Forest Law", the province drew up and passed 10 items of provincial legislation supporting this law.

Nation To Increase Funds for Environmental Protection

*OW0601170795 Beijing XINHUA in English
1622 GMT 6 Jan 95*

[FBIS Transcribed Text] Beijing, January 6 (XINHUA)—China will raise more money to bring environmental pollution and ecological threats under control by the year 2010.

According to a blueprint unveiled by the State Bureau of Environmental Protection (SBEP) here today, China will increase the financial share of the gross national product (GNP) in environmental protection from 0.7 percent to 1.2 percent in the next 15 years. In 1994 China earmark 23 billion yuan (about 2.7 billion U.S. dollars) for environment protection.

SBEP Director Xie Zhenhua said that foreign investment has played an important role in China's environmental protection. By the end of 1994 the country had used 1.15 billion U.S. dollars to curb pollution. It is estimated that by the year 2000 the figure will surpass three billion U.S. dollars. Financial support has come from the World Bank, the Asian Development Bank, the United Nations Development Program and the United Nations Environmental Program, according to the bureau.

Efforts will be focused on the setting up of a cleaner working environment, improvement of energy structure, and control of smoke and dust, industrial pollution and automobile exhaust fumes. Also dangerous waste will be treated centrally. Construction of nature reserves together with bases for rare species nearing extinction will get more support, said Xie.

It is learned that China has set up 763 nature reserves of various kinds and 200 breeding bases for rare species. Meanwhile, the forest coverage rate has reached 13.92 percent.

But the number of wildlife species continues to shrink drastically due to pollution and ecological damage, Xie noted. During the past 50 years some 200 species of higher plants have died out, and about 4,600 other higher plants are nearing extinction or are threatened, accounting for over 15 percent of the total. Besides, some 400 wild animals are nearing extinction or are threatened, SBEP statistics show.

Chen Junsheng Urges More Efforts To Protect Environment

*OW0601105095 Beijing XINHUA in English
1023 GMT 6 Jan 95*

[FBIS Transcribed Text] Beijing, January 6 (XINHUA)—China will increase efforts to protect its timber resources, and rare animals and plants, a high-ranking government official said here yesterday.

State Councillor Chen Junsheung said that more efforts are needed to protect forests, rare wildlife, and make the country green, including revising the existing Forestry Law and drawing up new laws to crack down on illegal logging and hunting.

Speaking at a meeting marking the 10th anniversary of the implementation of the Forestry Law, Chen said that the growing demand for timber and wildlife caused by the country's fast-growing economy and rising standard of living, has made it difficult for the heavily-populated country with few timber resources to protect its limited resources.

Vice-Minister Shen Maocheng said some local governments have failed to give adequate protection to their forests and wildlife, while others have developed their economies at the expense of forests or wildlife.

China, he added, will step up the pace of revising or drawing up laws concerning forests so as to better protect the forests and wildlife and to mete out harsh punishment to those illegally logging or hunting protected rare wildlife.

The penalties in the existing laws are much too mild for what the lawbreakers deserve, the vice-minister said.

Shen said the Ministry of Forests will continue with its logging quota system and other measures banning logging and transportation of timber without licenses.

The official attributes China's improved protection of forests and wildlife and increased timber resources to the implementation of the Forestry Law, which took effect on January 1, 1985.

China's forest coverage was increased to 13.9 percent last year from 12 percent in the late 1970s, with a total of 500 million people participating in planting 18 billion trees over the past decade, as part of nationwide efforts to make the country green.

CAS Scientists Develop Successful Method To Control Sand

*OW0601092095 Beijing XINHUA in English
0830 GMT 6 Jan 95*

[FBIS Transcribed Text] Beijing, January 6 (XINHUA)—A railroad running through a sandy area in northwest China was not engulfed, but accounted instead for some 3.6 billion yuan (about 424 million U.S. dollars) in profits and taxes over the past three decades.

When China first began planning to build it in the early 50s, some Soviet experts predicted that the railroad would disappear in shifting sand dunes within a few years.

But, a kind of miracle was created by scientists from the Lanzhou Institute of Deserts of the Chinese Academy of Sciences (CAS), and the "fix and block" method they developed to deal with the sand along the railroad is now widely used in China's desert projects.

The Lanzhou Institute of Deserts is China's only research organ focusing on desert research. It was honored as an advanced unit in protecting the global environment by the United Nations Environment Program in 1988.

CAS has by now set up 18 field stations in southwest China's Tibetan Autonomous Region, in northwest China's Mongolian Autonomous Region, in Beijing, in east China's Shandong Province, and in central China's Henan Province.

After years of monitoring and controlling sand in these areas, vegetation grew at a rate of 35 to 65 percent, compared with no more than 10 percent before. Wind and dust are down 20 to 50 percent from before.

With more than 1.5 million sq km of deserts and sandy areas, China is one of the countries that suffers desertification most in the world. Its desertified land is expanding at an annual rate of 2,000 sq km. Some 4.5 billion yuan (nearly 530 million U.S. dollars) is figured in direct economic losses yearly as a result.

Xu Guanhua, vice-president of CAS, said that the Lanzhou Institute of Deserts has found ways of controlling desertification in China by setting up a protective system by forming a network of farmlands and sand binders, in order to pursue ecological, economic, and social advances.

During his recent inspection tour of Yanjin County in central China's Henan province, Xu said that Yanjin is an example of how more investment in science and technology and more importance given to scientific work will greatly promote the development of the economy.

Yanjin is located along the old course of the Huanghe River and suffered seriously from flooding and shifting river courses. Over 80 percent of the land in the county is sanded.

In 1988, CAS sent a group of members there to help upgrade the local agricultural output by improving 20,000 mu of sanded soil (over 1,330 hectares). With their help, the agricultural output of the county grew by four million yuan per year over the past five years.

The latest success is a newly built hard-surface road for oil transportation in the Tarim Basin, the second largest shifting desert in the world. Two hundred and nineteen kilometers of the nearly 300-km-long road run across big shifting sand dunes. By applying the "fix and block" method, Chinese scientists efficiently prevented shifting sands from burying the road.

According to Xu, CAS has undertaken a number of state projects for managing and recovering areas, including the sand stabilization of the road in the Takla Makan Desert, a study of sandstorms in the northern part of China, and afforestation and water balance in the northeast, northwest and northern parts of China.

CAS also exchanges ideas and conducted cooperation in sand control with more than 20 countries around the world.

Beijing To Curb Acid Rain

*OW0901145195 Beijing XINHUA in English
1432 GMT 9 Jan 95*

[FBIS Transcribed Text] Beijing, January 9 (XINHUA)—China will enhance efforts at curbing acid rain, which has been increasing in recent years.

Xie Zhenhua, director of the State Environmental Protection Bureau, told XINHUA here today that China will

further study whether pollutants are causing acidic substances that spread to and from neighboring countries which may produce acid rains.

The director also noted that although problems exist with the flow of these pollutants between parts of China and its neighboring countries, the amount of flow and the possible impact on the ecology need further study.

Initial studies have indicated that discharged pollutants turning into acids moved mainly within the country, he said, explaining that the burning of coal containing a high density of sulphur was a major cause of sulphur dioxide resulting in acid rain. The government has taken, and will continue to take, legal, technological and economic measures to bring the hazardous rain under control.

A law drafted, governing the prevention of air pollution, has been submitted to the National People's Congress, China's top legislature, for examination and approval. The law clearly defines the control of sulfur dioxide from industrial coal. The country has also placed fines on the discharge of sulfur dioxide and has effectively employed desulfurization technology.

He said that the acid rain has expanded from parts of southeastern China to most areas south of the Chang Jiang River, the line dividing China north and south.

Environmental experts have said that acid rain has even spread north of the Chang Jiang River, even as far north as China's Yellow River.

A worse problem is the fact that acid rains threaten to extend northward and westward, and the perilous rains have brought obvious economic and ecological losses, he said. In a report submitted to the government by 16 renowned environmental experts, acid rains covered 2.8 million square kilometers in 1993, a jump of 60 percent from 1985.

National Forestry Meeting Ends in Hefei

OW1001132695 Hefei Anhui People's Radio Network in Mandarin 1100 GMT 26 Dec 94 95

[From the "Provincial Hookup" program]

[FBIS Translated Excerpts] On 25 December, the six-day national meeting of directors of forestry bureaus and departments ends in Hefei. It was a mobilization meeting for gradually establishing a relatively sound ecological system and a relatively advanced production system in forestry.

Forestry Minister Xu Youfang presided over the closing ceremony. Vice Forestry Minister Zhu Guangyao made a closing speech. Vice Forestry Minister Liu Yuhe read a ministry decision on commending advanced units and individuals in publicizing forestry and promoting advanced forestry technologies throughout the country. Liu Yuhe also read a circular concerning the nation-wide investigation on the situation of artificial afforestation and reforestation and of consumption of forest resources.

Other leading members of the Forestry Ministry, including Wang Zhibao and (Li Changjian); and party, government and Army leaders from this province, including Lu

Rongjing, Hui Liangyu, Meng Fulin, Wang Zhaoyao, Shen Shanwen, Jiang Zehui, and Wang Sheyun attended the closing ceremony.

The current meeting fully reviewed China's reform and forestry development situation in recent years, objectively analyzed the current situation faced by forestry work, clearly explained the basic line for our country's forestry development in the Ninth Five-Year Plan, put forward the desired goals for establishing a relatively sound ecological system and a relatively advanced production system in forestry, and made arrangements for key forestry tasks in 1995. [passage omitted]

The meeting called stressing afforestation this winter and next spring and on preventing forest fires to lay down a good foundation for further improving forestry work next year.

During the meeting, Vice Forestry Minister Wang Zhibao explained China's forestry work during the Ninth Five-Year Plan and the basic line and a long range plan for developing forestry up to the year 2010. [passage omitted]

Directors of forestry bureaus and departments of Anhui, Beijing, Hubei and seven other provinces, municipalities and regions introduced the situation of forestry in their respective localities at the meeting.

Progress Seen in Waste Water Recycling

OW1101050195 Beijing XINHUA in English 0139 GMT 11 Jan 95

[FBIS Transcribed Text] Xian, January 11 (XINHUA)—Chinese scientists have found a new way to recycle sewage containing chemical pollutants.

The technique, developed by a research panel at the Xian Highway Institute, Shaanxi Province, has passed a state technical appraisal.

The new method can separate 70 percent of oil and 99 percent of organic pollutants from chemically-polluted sewage by treating it with a compound emulsion agent and flocculating agent and applying other bio-engineering techniques.

The technique will be used to recycle waste water at ports in Shanghai, Tianjin, Dalian, Xiamen and Guangzhou.

The invention is of great use in China because ports load and unload 800,000 tons of bulk chemicals each year, some of which pollute sea water in the process of transportation.

The research panel, headed by Profs. Zhu Junhuang and Hsien-Neng Hsieh from New Jersey University in the U.S., began research into the subject in 1992.

Funded by the World Environmental Protection Foundation and the World Bank, the project was part of the country's effort to control pollution caused by bulk toxic liquids in the process of transportation.

As one of the 37 signatory nations to the Convention on the Prevention of Marine Pollution by Dumping Waste and other Matter, China has attached great importance to the handling of sewage containing liquified toxic chemicals.

More Efforts To Protect Farmland, Environment Urged

OW1001223695 Beijing XINHUA in English
1642 GMT 10 Jan 95

[FBIS Transcribed Text] Beijing, January 10 (XINHUA)—Agriculture Minister Liu Jiang called here today for effective measures to protect farmland and the environment.

The efforts are necessary for the country to achieve its grain and cotton production targets for this year and the next five years, the minister said at a national meeting on agriculture.

China plans to produce 455 million tons of grain and 4.5 million tons of cotton this year.

The country also plans to produce 500 million tons of grain, 48.5 million tons of meat and 28.5 tons of aquatic products by the year 2000, up 50 million tons for grain, 10.08 million tons for meat and 10.27 million tons for aquatic products compared with 1993.

The key to the targets is sufficient farmland, said the minister.

He said that excessive development zones and real estate development over the past several years have used a great amount of farmland but the practice has been curbed by the central government.

Because of industrial development, China's per capita farmland decreased from 0.018 ha [hectares] to 0.0086 ha in the past four decade period, about one third of the world's average per capita.

Liu also criticized some areas for their misuse of the country's limited farmland.

"In some areas farmland has been used to plant fruit trees, or build fish farms, a practice which must be stopped," the minister said.

With the rapid economic development and population growth of 15 million per year, farmland resources will continue to decrease, the minister said.

He also called for tough action to curb pollution affecting the country's farmland, rivers and lakes.

Agricultural departments at all levels should improve their environmental monitoring systems, promote environmentally-sound ecological agriculture, and pay close attention to the control of rural industrial pollution, the minister said.

Government To Intensify Efforts To Fight Desertification

OW1701171795 Beijing XINHUA in English
1610 GMT 17 Jan 95

[FBIS Transcribed Text] Beijing, January 17 (XINHUA)—China is to intensify its desert-control efforts by promoting scientific and technological advances and integrate scientific research with desert-control projects.

At a conference on desert-control research, Minister of Forestry Xu Youfang said China will organize joint studies of some key technological issues concerning desert control and make optimal use of the existing technology.

Since 1991, the minister said, China has brought 2.2 million ha [hectares] of desert and arid areas under control, and reclaimed about 100,000 ha of arable land from the desert.

However, about 1.5 million sq [square] km of land in China is still desert or badly eroded, equal to one sixth of China's total land area. Worse still, such areas are expanding at 2,100 sq km annually, affecting the lives of 170 million people.

Protection of Water Resources To Be Stepped Up

HK1501033595 Beijing CHINA DAILY in English
14 Jan 95 p 2

[By Liang Chao: "Protection of Rivers To Increase This Year"]

[FBIS Transcribed Text] Faced with worsening water pollution in China's largest rivers, the government is stepping up its protection of the country's major water resources this year.

As part of an overall plan aimed at controlling water pollution, the Ministry of Water Resources began an investigation in 1992 to pinpoint the places where foul water was being discharged in the drainage areas of the country's seven largest rivers.

The programme covered the drainage areas of the Yangtze, Yellow, Huaihe, Haihe, Songhuajiang, Liaohe and Pearl rivers, as well as Taihu Lake.

A detailed report on the investigation, which covered more than half of the country's territory, is expected to be completed by the end of this month, said Liu Ping, an official with the ministry's Department of Water Administration and Water Resources.

Data collection by the seven rivers' administration commissions is already complete.

"The investigation will play a key role in helping water administration authorities work out anti-pollution policy and practical measures to prevent the further worsening of water quality in the largest rivers," Liu said.

People in charge of drafting development programmes for these river drainage areas for the next Five-Year Plan (1996-2000) were urged to take water-quality-control into account.

Last July, news of severe pollution in the Huaihe River aroused great public concern. Large amounts of sewage water were discharged into the river's middle and lower reaches during flood season, killing thousands of fish in the Hongzeshu, one of China's largest fresh-water lakes; polluting local sources of drinking water and damaging the region's economy.

"The pollution has been so serious that parts of the rivers, lakes such as the Baiyangdian in the north and the Taihu in the south, as well as many of river-fed reservoirs will probably be out of use," experts warned in their latest special report submitted to the country's parliament.

An official survey showed that about 37 billion tons of liquid waste, mostly untreated, are poured into China's rivers, lakes and reservoirs annually.

As a result, 436 out of 523 rivers tested by experts were found to be polluted. The pollution was worse on rivers running through cities.

Of 43,565 kilometres of the largest seven rivers' water systems, more than 1,900 kilometres were found to be polluted by untreated effluent.

"Worst of all, fish and shrimps have vanished in many of the seriously polluted river sections," the experts said in their report.

The pollution situation in the four rivers in the North and Northeast China was worse than in the three in the south, they said, noting that pollution was found in 91 per cent of the Haihe, 67 per cent of the Yellow River, 65 per cent of the Huaihe and 57 per cent of the Songhuajiang and Liache.

In the south, 30 per cent of the Yangtze and 16 per cent of the Pearl River suffer from the massive discharge of sewage.

Tibet Protects Environment With Legal Force

OW1401064595 Beijing XINHUA in English
0630 GMT 14 Jan 95

[FBIS Transcribed Text] Lhasa, January 14 (XINHUA)—Southwest China's Tibet Autonomous Region is effectively protecting its natural resources and ecological environment through legislation, according to the findings of an inspection by regional legislative organs.

Since the 1970s national laws and regulations concerning environmental protection have been implemented in the region, and the Standing Committee of the regional people's congress has stipulated a series of laws, regulations and rules in line with local conditions.

In 1993 the regional people's congress passed the "Regulations Regarding Environmental Protection in the Tibet Autonomous Region", marking a major step taken by local authorities in this field.

So far, the region has seen virtually no pollution caused by construction projects.

In recent years, the region has drafted and implemented regulations concerning the protection of forests and the management of collectively and privately owned mines, as well as for the implementation of the national wildlife protection law. In addition, regulations govern sewage discharge and grassland protection have also been issued.

Column Urges Effort To Combat Acid Rain

HK1801102295 Beijing CHINA DAILY in English
18 Jan 95 p 4

[By Guang Li from the "To the Point" column on the "Opinion" page: "It's Pouring With Acid"]

[FBIS Transcribed Text] Acid rain is falling on China and damaging crops, buildings, historic sites and polluting rivers and lakes. This source of pollution seriously threatens the environment.

A report presented by 16 experts on acid rain revealed that, in the past eight years, acid rain covered areas have

increased to 2.8 million square kilometres—about 29 per cent of the country's territory. In 1985, the affected area was only 1.75 million kilometres.

It is estimated that each year economic loss caused by acid rain—which damages crops and buildings—is about 14 billion yuan (\$1.6 billion).

Such a deterioration happens while the country is spending millions of yuan each year in protecting its environment.

Scientific studies have proved that acid rain is mainly caused by excessive discharge of sulphur dioxide into the air. In China, the increasing burning of coal is the main culprit.

Laws and regulations on environmental protection are to be stipulated and enforced to curb the spreading of acid rain. But more importantly the country needs a scientific and consistent policy toward the utilization of coal.

A decade ago, encouraged by the increasing oil output, many factories were required to renovate their coal-burning boilers so that they could use oil as fuel.

In recent years however, frustrated by the increasing demand for oil, boiler owners are being encouraged to turn back to coal.

Such an inconsistency has not only wasted money on renovation and re-renovation but also worsened the environment situation.

Eleven State Departments To Sponsor Annual Environment Drive

HK2001064695 Beijing CHINA DAILY in English
20 Jan 95 p 1

[By Zhu Baoxia: "Environment Drive Planned"]

[FBIS Transcribed Text] The State is planning a nationwide publicity drive to promote awareness of the importance of protecting the environment and preserving natural resources.

The annual campaign, to begin in the spring, will be sponsored by 11 State departments including the National People's Congress [NPC] Environment and Resources Protection Committee, National Environmental Protection Agency and ministries that oversee agriculture, forestry, water resources and land use.

More than 20 major newspapers, radio and TV stations will send reporters out on environmental inspections to expose illegal practices that damage the environment and publicize contributions to the ecological cause.

"Environmental protection has become one of the important components of the country's reform and modernization," said Wang Bingqian, Vice-Chairman of NPC Standing Committee.

Wang said that publicity and education must be extended to arouse official and public awareness of environmental issues and to inform people of new ideas about sustainable development and environmental protection.

Speaking at a meeting of reporters and officials from the sponsoring departments, he called for all-out efforts to take

the environmental inspection and publicity campaign to every corner of the country and carry it through to a satisfactory conclusion.

Last year, more than 150 reporters from 20 media organizations conducted inspections in 20 provinces, autonomous regions and municipalities.

Many major environmental pollution cases were uncovered and drew attention from governments at all levels.

One of the cases uncovered involves pollution in the Huaihe River.

The river has been severely contaminated for many years and poses a threat to the health of 150 million residents in the provinces of Shandong, Anhui, Jiangsu and Henan.

The case was first exposed in newspapers, and was picked up by TV and radio stations.

The State Council sent experts to inspect the river and pledged to clean it up before the year 2000.

AUSTRALIA

Editorial Questions Viability of Proposed Carbon Tax

BK1801070595 Sydney *THE AUSTRALIAN FINANCIAL REVIEW* in English 6 Jan 95 p 12

[Editorial: "The Trouble with a Carbon Tax"]

[FBIS Transcribed Text] The short-term political appeal of a carbon tax is obvious, but the economic reality is that a carbon tax in Australia would be an inefficient way to either raise revenue or cut the world's emission of greenhouse gases.

The tax reported to be under consideration by the Federal Government would be designed primarily to raise revenue rather than reduce greenhouse gas emissions.

However, even a relatively small tax—the Government is said to be thinking of \$1.25 per tonne of carbon dioxide—would have the potential to adversely affect Australian industry, particularly the export and import-competing industries which find it more difficult to pass increases in costs on to customers.

The Government might try to avoid directly taxing the energy inputs of exporters. However, past efforts to relieve exporters from the burden of Australia's indirect tax system have run up against Australia's obligations under the GATT (or at least the Australian Government's interpretation of the GATT code) and it is difficult to see how exporters would be excused from this tax.

But even if they were, the carbon tax would still cascade through the rest of industry and, in the process, add an indirect burden to exporters.

Some regions, such as Victoria, would be affected more than others. A tax of \$1.25 a tonne of carbon dioxide is estimated by the Business Council of Australia to add 10 per cent to the cost of black coal and 20 per cent to the cost of brown coal.

The general principle in taxation is to try to avoid taxing business inputs. Why would the Government want to flout that principle when it can easily raise the same amount of money by less damaging means?

The answer is, of course, that the Government would be pretending to do something more noble than simply raising revenue. It would be pretending to cut carbon dioxide emissions to meet its obligations under the Rio convention on greenhouse gases.

That's what makes a carbon tax potentially salable to the public and to the Democrats and Greens in the Senate.

But it's a con trick. To meet the targets of the Rio convention, a carbon tax would have to be much heavier than anything this Government would ever contemplate.

The reality is that the Keating Government has absolutely no intention of crippling the coal industry and destroying Australia's comparative advantage in energy.

And, of course, nor should it. Even if a reduction in the world's emission of greenhouse gases is justified, Australia should be the last country to cut its emissions of carbon dioxide.

With its vast coal reserves, Australia is one of the world's most efficient producers of energy-intensive products. The cost for Australia of cutting back carbon dioxide emissions is far greater than for most other economies.

The reduction of the world's carbon dioxide emissions should occur first in those countries and regions where the cost of the reduction is lowest.

Indeed, many countries can improve their economies and cut their carbon emissions at the same time by switching to cheaper methods of generating electricity (using higher quality imported coal, for example) and, in some cases, by phasing out subsidies on the use of electricity.

In the global scheme of things, the best contribution that countries like Australia can make to the reduction of carbon dioxide emissions is to help finance the cost of emission reduction in poorer nations.

That's why the Australian Government has heavily qualified its commitment to the Rio convention. Australia will cut its greenhouse gas emissions only if it can do so without seriously damaging its economy.

And that's also why a carbon tax could easily backfire politically on the Government.

It would be another case of the Government trying to impress the environmentalists with window dressing while it carried on with economic business as usual.

That kind of tactic backfired badly on the Government in the case of woodchips when the environmentalists finally refused to be jollied along with vague talk about phasing out the industry.

It is doubtful that the environmentalists would be impressed for long with a carbon tax that was clearly failing to produce a major reduction in the level of carbon dioxide emissions. In fact, Australia's carbon dioxide emissions are expected to grow more rapidly than those of most other OECD [Organization for Economic Cooperation and Development] countries in the coming years.

Not even the dedication of a small part of the revenue to environmental projects would be likely to impress the environmentalists under those circumstances.

Indeed, after the woodchips fiasco, the days when the Government could lead the environmentalists by the nose are probably over.

In which case the Government would be better advised to start treating the environmentalists like grown-ups, and look for some other, less glamorous way to reduce its Budget deficit.

JAPAN

Talks Set With Russia on Nuclear Waste, Weapons Dismantling

OW0601130595 Tokyo *KYODO* in English
1122 GMT 6 Jan 95

[FBIS Transcribed Text] Tokyo, Jan. 6 *KYODO*—Japan and Russia will hold a series of meetings in Tokyo next week

to discuss Russia's dumping of nuclear waste into the ocean and Japan's cooperation in helping Russia dismantle its nuclear weapons, the Foreign Ministry said Friday [6 January].

The Japan-Russia joint working group meeting on nuclear dumping will be held next Monday, while the talks on nuclear dismantling will take place Tuesday and Wednesday, both at the Foreign Ministry in Tokyo, the ministry said.

Japanese officials from the Foreign and Trade Ministries, Science and Technology Agency, and the Maritime Safety Agency will attend the meeting, while the Russian side will be represented by officials from the Foreign and Atomic Energy Ministries.

The Japanese and Russian officials are expected to discuss joint surveys of water samples from the sea, and cooperation on storage and disposal of liquid radioactive waste.

The meeting of the working group is the third of its kind since it was established after Russia's dumping of liquid radioactive waste into the Sea of Japan in October 1993.

Japanese, Russian and South Korean experts conducted a joint survey of the Sea of Japan last April but found no radioactive contamination.

Tokyo and Moscow also agreed on a joint project to construct a barge equipped with a radioactive waste disposal facility to be moored at a shipyard in the Russian Far East city of Vladivostok. The two countries solicited bids for the project last October.

Forestry Agency To Work To Develop Wood-Based Chemicals

*OW1101091695 Tokyo KYODO in English
0825 GMT 11 Jan 95*

[FBIS Transcribed Text] Tokyo, Jan. 11 KYODO—Japan's Forestry Agency will embark on a four-year program to develop chemicals out of wood which could eventually replace petrochemicals used in a variety of industrial products, agency officials said Wednesday [11 January].

The program, which starts in fiscal 1995 beginning April 1, aims to look into environment-friendly materials that could replace petrochemicals and also to make better use of wood, they said.

"It would be difficult to replace all petrochemicals but I believe 'wood chemicals' will replace those which cannot be recycled easily and must be disposed of," an agency official said.

Many chemicals from wood have been developed on a trial basis so far, including those for biodegradable sheets for agriculture and for a medical sheet that can filter out the HIV virus that causes AIDS.

But the issue of how to reduce costs remains.

"Wood chemicals would be competitive (with petrochemicals) if users are obliged to shoulder recycle costs," the official said.

Scientists To Work With Russians on Radiation Data

*OW1301102195 Tokyo KYODO in English
1005 GMT 13 Jan 95*

[FBIS Transcribed Text] Chelyabinsk, Russia, Jan. 13 KYODO—Japanese and Russian scientists are to advance cooperation in research into the effects of nuclear radiation on humans thanks to a three-day symposium on the subject which ended Thursday [12 January] in the southern Urals city of Chelyabinsk.

The symposium, which examined the impact of long-term exposure to radiation from nuclear facilities in the closed town of Chelyabinsk 65, brought together some 130 experts from eight countries, including Russia, the United States and Japan. Chelyabinsk 65 is 100 kilometers northwest of Chelyabinsk.

The experts compared data from the Chelyabinsk contamination, the 1986 disaster at the Chernobyl nuclear reactor in Ukraine, and the August 1945 atomic bombings of Hiroshima and Nagasaki.

During the symposium, Russian scientists outlined the extent of contamination from the town's Mayak nuclear plant and its related facilities.

Japanese experts from the Radiation Effects Research Foundation in Hiroshima, using data from their Russian colleagues, reported on their findings on the genetic effects of exposure to radiation among residents who drink water from the contaminated Techa river.

As a result, experts from the foundation agreed with their Russian colleagues to embark on a joint research effort in which the Japanese side will make available almost half a century's worth of data on victims of radiation from the atomic bombings of Hiroshima and Nagasaki.

The Japanese data will be used to help treat Russian workers at the Mayak plant who have become victims of radiation.

A. V. Akleyev, head of the Urals Research Center for Radiation Medicine, which sponsored the symposium, said data presented by the foundation staff at the meeting, particularly their method of evaluating amounts of radiation and their immunological survey, were invaluable.

Panel Calls For New Look at Environmental Preservation

*OW1701092695 Tokyo KYODO in English
0738 GMT 17 Jan 95*

[FBIS Transcribed Text] Tokyo, Jan. 17 KYODO—An advisory panel to the prime minister recommended Tuesday [17 January] a package of measures to raise awareness about the environment, including using recycled paper for school textbooks and holding an international conference on the environment.

In a report to Prime Minister Tomiichi Murayama, the panel called for the setting up of a body with a wholly new approach to integrating the natural, cultural and social sciences in drawing up a research strategy for the preserving of the global environment.

The panel, which serves the premier in a private advisory capacity on issues related to the environment and the 21st century, is headed by Ichiro Kondo, who is also head of the Central Environmental Council affiliated with the Environment Agency and president of the Science Council of Japan.

The report warns that humankind could face danger from the political, economic and social implications of the deterioration in the global environment from global warming and other phenomena.

Among the panel's more concrete recommendations are that educators also contribute to environmental awareness through such measures as textbooks which use recycled paper and more outdoor activities for students.

It also urges the holding of a global environment conference as a venue for positive dialogue between ngos, industry, academics and the government.

It said the conference should have the participation of nongovernmental organizations such as citizens' groups, which it says play a significant role in spreading awareness of environmental preservation.

The 14-member panel said Japan should strengthen its environmental information network, including with foreign countries, build up a data base on environmental issues, and foster experts on the global environment.

The administration of former Prime Minister Morihiro Hosokawa set up the panel in February 1994 to look into Japan's contribution to the global environment.

'Substantial Number' of Conservation Violations Noted

OW1401114695 Tokyo KYODO in English
1037 GMT 14 Jan 95

[FBIS Transcribed Text] Tokyo, Jan. 14 KYODO—A substantial number of wild animals and plants, and products made from them, are being imported into Japan in violation of an international conservation treaty, a group monitoring compliance with the treaty said Saturday [14 January].

Traffic Japan, a private entity, said that among the imports monitored were animals and plants that are said to originate from farms and breeding facilities that do not exist.

Some of the imports were found to have designated a country of origin where no such animal or plant species are known to exist in their natural habitats, confirming attempts by certain parties to circumvent export controls set by the 1973 Convention on International Trade in Endangered Species (CITES), also known as the Washington Convention.

The group said the findings show that Japan has "many problems" with implementing the treaty provisions.

The import survey was commissioned by an auxiliary body of the Ministry of International Trade and Industry (MITI), using customs registers and Japan's annual reports to the CITES secretariat in Geneva since 1991.

The treaty allows imports of endangered species listed on its Appendix I if they were not caught in the wild but bred or cultivated on farms.

Using this loophole, a total of 57 imports involving 14 protected species were labeled as farmed products although the designated facilities do not exist in the country of origin, according to the survey.

Among them were a tapir from the U.S., chimpanzee blood serum from the Netherlands and seven Asian elephants from Thailand. None of these countries owns facilities recognized by CITES for breeding these animals.

In 16 cases, endangered animals or animal products were imported from countries where they have no natural habitat such as a South American monkey from Switzerland and Nile crocodile bags from Papua New Guinea.

In nine other cases, species such as the Asian black bear and the Asian tiger that are listed on Appendix I, which places an outright ban on their trade, were treated like Appendix II species, among whose import are allowed with a permit from the exporting country.

Ivory from the African elephant was also imported in defiance of a CITES ban on its trade. Officials at MITI's Import Division said it is "impossible" for elephant ivory to have been imported as an Appendix II item.

They said an erroneous entry in the customs register or a mistake during the compilation of materials must have created that impression.

In about 600 cases, products were said to have come from Colombia and Paraguay, both countries that prohibit any exports of products from rare animals or plants.

Hisako Kiyono, spokeswoman for Traffic Japan, said Japanese coastal control is insufficient to prevent the smuggling of endangered species.

"Imports should not be allowed at all until such problems as incomplete or contradictory export permits have been solved," she said.

NORTH KOREA

Dialogue Denounces South's Nuke Dumping Site Construction

SK1801080795 Pyongyang Korean Central
Broadcasting Network in Korean 0630 GMT 12 Jan 95

[Dialogue between Kim In-kuk, director of a bureau of the State Environmental Committee; and station reporter Yi In-chun: "The Kim Yong-sam Ring Should Immediately Stop the Maneuvers To Build a Nuclear Waste Disposal Site"]

[FBIS Translated Text] [Yi] How are you?

Kim: How are you?

Yi: As you know, the South Korean puppets announced recently that they have decided to build a nuclear waste disposal site—which had remained undecided for six years due to the people's strong resistance—in Kulok island located in Tokchon-myon, Ongjin County, Kyonggi Province. This has evoked strong indignation not only among our people, but also among the South Korean people. Therefore, I would like to discuss this matter at this time.

Kim: Yes. The island called Kulok island located in Tokchon-myon, Ongjin County, Kyonggi Province where the South

Korean puppets are scheming to build a nuclear waste disposal site is located just across the Military Demarcation Line and is not far from the northern half of our Republic. The Kim Yong-sam puppet clique's decision to build at this location a nuclear waste disposal site, which will inflict a tremendous damage to human life and ecological and natural environment, is a deliberate and calculated grave provocation designed to impose the damage caused by radioactive substance even on us.

As has already been revealed, in South Korea today, spent nuclear waste from nuclear facilities which operate secretly are being piled up mountain-high, and because of this South Korea is faced with serious difficulties in disposing this nuclear waste. The South Korean puppets selected six areas, including Ulchin County of North Kyongsang Province, Yangsang County of South Kyongsang Province, and Changhung County of South Cholla Province, as proposed sites for nuclear waste dumping. However, they met strong opposition from the people in these areas and failed to decide a proposed site for nuclear waste dumping among these areas.

This notwithstanding, traitor and puppet Kim Yong-sam has recently decided to build a nuclear waste dumping site on an island near our side's area. This is an intolerable criminal act designed to impose nuclear disaster even on the whole country and all the nation, let alone the South Korean people.

Yi: You are right. This is why the State Environmental Committee bitterly condemned on 30 December of last year the Kim Yong-sam clique's maneuvers to build a nuclear waste disposal site on an island near our side's area, branding them as an antinational criminal act designed to make the whole land of the country a barren, nuclear-contaminated area and to make the entire nation in the North and the South a scapegoat of nuclear radioactivity. It is an already known fact that South Korea has become a sea of death and a land of death due to the nuclear waste dumped by the South Korean puppets. The nuclear waste dumped into the sea by the South Korean puppets in the course of their nuclear development reaches 11,000 trillion becquerels. Because of this, the sea in South Korea has been covered with nuclear waste, and maritime resources—including brown seaweed—have been completely destroyed. Those women who had eaten contaminated fish delivered deformed and premature babies. The ecosystem on the sea and the survival of human beings has suffered a fatal damage in South Korea today.

Despite such a serious environmental situation, the South Korean puppets are attempting to build a nuclear waste disposal site near our side's area in a bid to inflict such a damage on us. So, how can we tolerate this?

Kim: I agree with you. As you know, international law bans the act of illegally dumping nuclear waste and strictly prohibits nuclear facilities and nuclear waste disposal sites from being built anywhere. While clearly knowing these facts, the Kim Yong-sam ring is attempting to build a nuclear waste disposal site on an island near our side's area despite the South Korean people's strong opposition and rejection in a bid to inflict serious damage on fellow countrymen. This reveals to the world that the rascals are utterly ignorant gangs and hoodlums who lack the conscience of the nation and who are ignorant of even the basic international law.

Yi: That is right. The South Korean people are strongly struggling against traitor Kim Yong-sam's moves to build a nuclear waste disposal site because they are well aware of the dangerous nature of nuclear waste, are they not?

Kim: Yes, it is true. The residents in islets around Tokchon-myon, Ongjin County, Kyonggi Province have been recently waging a joint struggle against the construction of a nuclear waste disposal site on Kulok island. Some 300 residents on Tokjok islet in Tokchon-myon who belong to the Committee for Struggle Against the Construction of Nuclear Waste Disposal Site on Kulok Island. They gathered in front of the Tokchon-myon office last December and demanded that the construction of the nuclear waste disposal site be immediately suspended and that the riot police's suppression of the residents be stopped. They condemned that the puppet government had decided to build a nuclear waste disposal site in advance on Kulok island and persuaded the residents with a deceptive trick.

On the other hand, some 400 residents from Sowa islet, Ma islet, Paeka islet, and other nearby islets gathered in Tokjok islet to join the struggle. They vowed to struggle to the end together with the residents on Tokjok islet. Also, in a letter sent to the Incheon City Assembly on 23 December last year the Union of Environment Movements of Incheon, condemning that the puppet government's unilateral decision to select Kulok as a nuclear waste disposal site is an act of mocking Incheon citizens, urged the Incheon City Assembly to officially declare its position of opposing the construction of a nuclear waste disposal site. This is a just struggle.

Yi: That is right. The South Korean puppets should look straight at the will of the South Korean people struggling against the construction of a nuclear waste disposal site and should act discreetly. In particular, traitor and puppet Kim Yong-sam should look straight at our firm position of treasuring the lives of fellow countrymen and of protecting natural environment and should immediately renounce these criminal moves to build a nuclear waste disposal site near the area of the northern half of the Republic.

Kim: That is right. We will by no means idly look at the South Korean puppets' schemes which will result in damaging human life and destroying sea ecosystem by building a nuclear waste disposal site near our sea. If the Kim Yong-sam puppet clique persistently builds a nuclear waste disposal site on Kulok island despite our strong warnings, it should know that it will be held totally responsible for all consequences arising therefrom.

Yi: Thank you.

KCNA Reports Rally Held To Protest Nuclear Waste Dump Site

*SK2001102895 Pyongyang KCNA in English
1008 GMT 20 Jan 95*

["South Korean Puppet Clique's Scheme To Build Nuclear Waste Dump Denounced"—KCNA headline]

[FBIS Transcribed Text] Pyongyang, January 20 (KCNA)—Citizens of the port city of Haeju on the west coast of Korea denounced the scheme of the South Korean puppet clique to build a nuclear waste dump near the area of the North.

The South Korean puppet clique has chosen Kulop islet in Tokjok-Myon, Ongjin County, Kyonggi Province, for the site of the nuclear waste dump and is working to promote its construction.

People from all walks of life in Haeju, the capital of South Hwanghae Province, facing the islet held a rally on January 19 and scathingly denounced the South Korean puppet clique who are scheming to do harm to the people of the North by building a nuclear waste dump near the area of the North after a total failure in its vicious attempt to stifle the North over the fictitious "nuclear issue".

The speakers at the rally demanded that the Kim Yong-sam group withdraw at once its heinous criminal plan to build a nuclear waste dump in Kulop islet.

If the puppet clique dare perpetrate the anti-national act, ignoring our warnings, they will have to bear full responsibility for all the consequences arising therefrom, they warned.

They said the South Korean rulers must clearly know that they will not be allowed to pollute one inch of our land and one metre of our sea with nuclear waste and immediately give up their criminal scheme to build a nuclear waste dump on Kulop islet.

CPRF Secretariat Denounces ROK Plans for Nuclear Dump

*SK200104495 Pyongyang KCNA in English
0418 GMT 20 Jan 95*

[FBIS Transcribed Text] Pyongyang, January 20 (KCNA)—The secretariat of the Committee for the Peaceful Reunification of the Fatherland issued information No. 672 January 19 denouncing the South Korean puppet clique for scheming to build a nuclear waste a dump on Kulop Islet and killing a guiltless person who protested against the project.

The information says:

Kim Kye-won, an old man in Tokjok-myon, Ongjin County, Kyonggi Province, South Korea, died upon returning home after clashing with police in a demonstration against the construction of the nuclear waste dump on the islet.

His death was not caused by any disease or accident, but by the truculent Kim Yong-sam group's fascist suppression.

It occurred because the traitor Kim Yong-sam issued a repressive order to "strongly counter an unlicensed demonstration" and mobilized police to crack down on the demonstration.

The fact clearly shows that the traitor Kim Yong-sam posing as a representative of "civil" regime is a heinous fascist murderer who surpasses the military fascist rulers of the "Fifth and Sixth Republics."

If the nation is to exist and the ecological environment of the country is to be protected, such fascist murderers and traitors as Kim Yong-sam must be removed decisively.

The South Korean people should rise more courageously in the struggle against the anti-popular, anti-national scheme of the Kim Yong-sam group to make the nation a victim to radioactivity.

SOUTH KOREA

Environment Minister Proposes Three-Way Consultative Body

*SK2001010895 Seoul YONHAP in English
0035 GMT 20 Jan 95*

[FBIS Transcribed Text] Seoul, Jan. 20 (YONHAP)—Environment Minister Kim Chung-wi met Chinese Ambassador to Seoul Zhang Tingyan Thursday and proposed the creation of a joint consultative body involving South Korea, China and Japan to cooperate in environmental affairs.

During the Chinese ambassador's courtesy call at the minister's office, Kim asked Zhang to assist in realizing environmental cooperation among the three countries.

Pointing out that the most sensitive environmental issues between Korea and China are Yellow (West) Sea pollution and acid rain, Kim emphasized the two neighbors can no longer put off bilateral action on these problems.

In particular, he requested that Ambassador Zhang act as a bridge linking the two countries to attain practical cooperation between the respective authorities concerned and to exchange information and personnel in the environmental industry and basic science fields.

For his part, Zhang said cooperation is progressing rapidly as witnessed by the Seoul-Beijing environmental cooperation accord reached in October 1993 and the summit agreement on mutual environmental cooperation last March.

Zhang said he will strive to increase cooperation in exchanges of techniques, ecology surveys and Yellow Sea pollution.

TAIWAN

Premier Reaffirms Support for Environmental Protection

*OW1001113695 Taipei CNA in English
1030 GMT 10 Jan 95*

[By Sofia Wu]

[FBIS Transcribed Text] Taipei, Jan. 10 (CNA)—Premier Lien Chan Tuesday [10 January] reaffirmed Taiwan's commitment to global environmental protection.

Speaking at the opening of the 1995 international regional conference on environmental partnership, Lien said Taiwan has developed an infrastructure to resolve environmental problems over the past few years.

"Institutions responsible for environmental work have been established throughout the governmental structure while the enforcement of environmental regulations has created a rapidly growing market for pollution control and environmental services," Lien said.

Noting that the 21 million on Taiwan people must live, work and generally go about life on a land of 36,000 square kilometers, an area smaller than the Netherlands or Switzerland, Lien said Taiwan still faces great challenges resulting from the intense demand on the environment and resources.

"So I hope this conference will serve as a great opportunity for us to learn from other countries' efforts in environmental protection," Lien noted.

The two-day conference is sponsored by the cabinet-level Environmental Protection Agency (EPA) with an aim to promote international cooperation in environmental protection.

By hosting the meeting, EPA administrator Chang Lung-sheng said, Taiwan hopes to learn from other countries' experience in resolving conflicts between industrial development and environmental protection.

Senior environmental officials from Singapore, the Philippines, Holland, Australia and Canada have been invited to attend the meeting.

Major topics include exploration of global environmental markets and cooperation in garbage recycling and natural resource conservation.

Tiger Conservation Campaign Kicks Off

OW1701024595 Taipei CNA in English
0203 GMT 17 Jan 95

[By Benjamin Yeh]

[FBIS Transcribed Text] Taipei, Jan. 16 (CNA)—The Council of Agriculture (COA) on Monday [16 January] guaranteed a donation of NT\$250,000 (US\$9,470) to a private organization that is sponsoring an Asian bicycle ride by three Americans to raise awareness for tiger conservation efforts.

Under the Beautiful Taiwan Foundation's "tiger ride," three Americans—photographer Meg Paar and travel writers Morgan Paar and Oliver Hack—will spend 15 months pedaling through 15 tiger reserves in India, Butan and Nepal.

While there, they will "gather information regarding tiger conservation and seek opportunities that allow Taiwan to participate in international tiger protection efforts," said Ted Ting, president of the Beautiful Taiwan Foundation.

COA Chairman Sun Ming-hsien pledged the money while meeting with Ting and the three Americans. "The program will be instrumental in the exchanges of international conservation," Sun said. Sun also promised to put up another NT\$250,000 from the private sector to finance the activity.

He said he hopes the three Americans, who head for India on Tuesday, will help make Taiwan's conservation efforts better known to the world through newspaper articles.

In August, the U.S. banned a range of Taiwan wildlife products, including live goldfish and tropical fish, feathers from certain species of birds, edible frogs and items made from reptile skin, to punish Taiwan for its continued trade in rhino horns and tiger parts.

The Legislative Yuan later passed amendments to the Wildlife Protection Law, increasing penalties for trade in endangered species and products gotten from such wildlife.

Taipei, EU Officials Discuss Trade in Waste Materials

OW1801104495 Taipei CNA in English
0925 GMT 18 Jan 95

[By P.C. Tang and Debbie Kuo]

[FBIS Transcribed Text] Brussels, 17 Jan (CNA)—Trade officials from the European Union (EU) and the Republic of China (ROC) met here Monday [16 January] and Tuesday to exchange views on technical controls on industrial waste materials and two-way trade in recyclable waste.

This was the first time Taiwan has discussed controls on and trade in industrial waste and scrap with any foreign country, according to Tsai Lien-sheng, secretary of the Board of Foreign Trade (BOFT), who headed the ROC mission to the meetings.

During the two-day consultations, EU and ROC officials reached consensus on the possibility of forging a bilateral trade accord on exchanges of recyclable industrial waste between the two areas. A timetable for the signing of the agreement, however, was not discussed.

To better familiarize EU officials with Taiwan's policies on industrial waste controls and trade, Tsai and his party prepared a control list of inbound and outbound waste and scrap from Taiwan, expecting better understanding from the European countries.

In return, EU negotiators suggested that Taiwan alter its control list of industrial waste and scrap to make it comply with the EU list to smooth two-way trade in the products.

The timetable for the signing of the agreement and details pertaining to industrial waste control regimes from the two sides will be further discussed in March when a Taiwan-EU trade consultation conference opens in Taipei, Tsai added.

According to BOFT tallies, Taiwan imported some U.S.\$266.98 million worth of industrial waste and scrap from the EU in 1993, with single scrap metals, waste and scrap of paper products, cobalt mattes and powder, [words indistinct], hard rubber and fish meal the major [words indistinct].

In comparison, Taiwan delivered U.S.\$16.54 million worth of industrial waste to the EU in the same year, with mixed metal [word indistinct] scrap, metallic compounds, hard rubber and paper products the dominant items.

THAILAND

Mekong Development Blueprint Previewed

BK1301133695 Bangkok THE NATION in English
13 Jan 95 p A7

[FBIS Transcribed Text] The four lower Mekong basin states are to map out the "Basin Development Plan", which will establish priorities and identify projects for the new regional development and cooperation, after the establishment of the Mekong River Commission in the upcoming Chiang Rai meeting in April.

The basin plan, which will serve as the master plan for the entire Mekong development, is a new concept that comes under the Agreement on the Cooperation for the Sustainable

Development of the Mekong River Basin. The agreement was initiated in Hanoi last November by Cambodia, Laos, Thailand and Vietnam.

The new master plan will replace the suspended Mekong Committee's previous indicative plan, which was featured by the "cascade plan of seven dams" along the Mekong mainstream.

However, two mainstream dam projects from the "cascade plan"—one in Laos and the other possibly in Cambodia, are still highly possible. But officials said it will take at least 10-15 years to work on for approval and further accomplishment.

Michael Heyn, United Nations Development Programme (UNDP) regional representative, said the Basin Development Plan will be one of the first things that come under the responsibility of the Mekong River Commission.

"It will be a very comprehensive plan, taking a broad look at all the need and potential for development in this sub-region," said Heyn.

According to Prof George E Radosevich, UNDP's legal consultant, the "Basin Development Plan" will focus on both mainstream and tributaries development as the "integrated package".

"It's no longer a series of dams on the mainstream only. The countries may be able to accomplish a lot of that by controlling the tributaries," said Radosevich, who is expert in water law and has worked for UNDP on the Mekong issue for 15 years.

He noted: "Under the new Basin Development Plan, it's an optimization model, how do we best utilize the geographical location. We look at all of the factors featured in the basin all the way from the top in the mountainous region to the low delta area in Cambodia and Vietnam."

He said the previous plan, which was created in the 1950s and revised in the 1960s, was primarily development-oriented programme. The "cascade concept" came from a similar concept on the Columbia River where there are many reservoirs in the same river in a cascade form, said Radosevich.

"We can no longer use the concept of the cascade. Internationally, it is not too acceptable," he told *The Nation*, adding the situation in the region has also changed with population increase and new technology together with the rising environment concern.

"At this point in time, the emphasis is not under the old cascade concept. That was when the developmental spirit in the water resource development was very high. That was in the 50s and 60s all over the world," he said.

Radosevich said the cascade concept was primarily based on the theory that water travels downward and is then used and reused to gain the optimum benefit from a single given unit of the water.

However, in the future, feasibility of the cascade plan is subject to further benefit-cost analysis, which will take into account social, environmental and economic aspects, said the UNDP legal consultant.

"If we do an environmental, social and economic cost analysis and the plan concludes that we need to have a series of the dams, then perhaps, the cascade concept may come into being," said Radosevich.

He stated that two dam projects in the "cascade plan" are, however, still highly possible for future development. One of these will be the Luang Prabang Dam. He said the dam site would be moved from the original Mekong mainstream to a tributary in Laos as the present site would flood a Laotian cave of religious significance.

He said: "In my feeling, there has to be a minimum of two dams: an upper dam and a lower dam, somewhere from Savannakhet to Chiang Rai, and somewhere from Pakse to Kratie in Cambodia."

He said all projects are based on the unanimous vote of all the member countries.

The new Mekong agreement also allows the trans-water diversion scheme for the upstream Thailand with "notification" for other member states for projects during the wet season and "prior consultation" during the dry season. It is also subject to concerned parties to determine whether a special agreement is needed in relation to the effect it causes on the river, according to the UNDP consultant.

The Mekong River Commission will determine the minimum acceptable flow levels and criteria for selecting sites for stations to monitor the water levels in various parts of the basin.

Ten Logging Companies Withdraw From Cambodia

BK0701100095 Bangkok BANGKOK POST in English
7 Jan 95 p 1

[FBIS Transcribed Text] Chanthaburi—Ten Thai companies with logging concessions in Cambodia have pulled out workers and logging equipment following uncertainty during the dry season and a Phnom Penh decision to ban logging from January 1.

Somphong Sathitsathian, a joint investor in the Wooden Supply Import & Export Company, said the Phnom Penh government has ordered Thai companies to take out workers and equipment despite a possible attack by government forces on Khmer Rouge rebel troops opposite Chanthaburi and Trat provinces.

The order said an operation against the Khmer Rouge may affect Thai workers and the properties of the companies.

Mr Somphong said Cambodian war planes dropped bombs in Ban Pothisat which is close to a Thai logging site, prompting the company to evacuate.

Most companies were ready to return to Cambodia to take their logs out, he said.

Each company had already paid a one-million-baht concession fee and US\$78 per cubic metre in royalties.

But companies must also seek approval from the Khmer Rouge to fell trees since most of the concession areas are under its influence.

The companies still have 1-2 years to log along the border.

Cambodian Minister Clarifies Deforestation Charges
BK2301033395 Bangkok THE NATION in English
23 Jan 95 p A4

[FBIS Transcribed Text] Cambodian Under Secretary for Environment Li Thuch has clarified his comments on deforestation in Cambodia which angered Foreign Minister Thaksin Chinnawat, Phnom Penh-based Ambassador Sakthip Krairoek said yesterday.

Sakthip said Thuch had explained in a letter that he was trying to blame the Khmer Rouge, not Thailand, for the massive deforestation in Cambodia.

Li Thuch said earlier that Cambodia's forests were being rapidly destroyed and that every day 300 trucks carried logs out of Khmer Rouge-held territory into Thailand despite the ban on logging.

Foreign Minister Thaksin Chinnawat last week reacted angrily to the statements which he described as unacceptable, silly and contemptuous.

"It is the Khmer Rouge who have mercilessly plundered our nation's natural resources without thought or consideration for Cambodia's environmental or economic future. I was not attaching any blame to the Thai authorities," Thuch wrote.

"The Royal Government of Cambodia is also acting to address problems with enthusiasm and ever-increasing levels of understanding," Sakthip quoted the letter as stating.

CZECH REPUBLIC

Local Official: CEZ Not To Build Fuel Depository in Temelin

AU2101214295 Prague LIDOVE NOVINY in Czech
19 Jan 95 p 2

["(dan)"]-attributed report: "An Intermediate Depository Will Not Be Constructed in Temelin"]

[FBIS Translated Text] Tyn nad Vltavou—The Czech Power Plants (CEZ) shareholding company is not giving any consideration to the construction of an intermediate depository for spent fuel in the Temelin nuclear power plant [JETE]. According to Alois Svoboda, chairman of the Association of Towns and Villages in the JETE Region Council, CEZ representatives expressed their opinion in this sense at recent meetings with the Association's Council. Apparently, this option will not be considered even if the aforementioned locality were to comply with the technical criteria for the construction of an intermediate depository. "Officials from the power generating company have assured the Council that they are aware of the situation that the construction of the nuclear power plant is creating in the region and, for political reasons, they are not considering burdening this region further," said Alois Svoboda. At the end of last year, the economy ministers discussed the possibility of constructing intermediate depositories for spent fuel directly on the grounds of the nuclear power plants. According to them, this option will reduce the ecological risks associated with transporting the fuel.

HUNGARY

Atomic Power Station Seeks Nuclear Waste Storage

LD1701222395 Budapest Duna TV in Hungarian
1700 GMT 17 Jan 95

[FBIS Translated Text] A nationwide research project has begun in Hungary to draw a map of areas which may be suitable for storing radioactive materials. At a press briefing by the body established to manage the project, we have learned that on the basis of surveys carried out so far, districts of 120 settlements match the requirements.

[Begin recording]

Correspondent Mihaly Durko: The radioactive waste created in Hungary must be stored in Hungary but there is a state guarantee that material from abroad which causes pollution cannot be stored in the country. Peter Ormai, representative of the Paks Atomic Power Station, considers it to be his most important current task to find a storage place for the power station's 15,000 cubic meters of waste in view of the fact that at some future point the station will become obsolete.

Ormai: The main sources of the low radioactive waste in the power station are the employees' used shoe-protectors, protective gloves, and other supplementary protective equipment, as well as replaced pipes and filters. The main sources of medium-level radioactive waste are the residue created by the water-cooling technology process, the residue left after crystallization and the various ion-exchange resins.

Durko: According to Hungarian standards, the fuel rods of the atomic power station cannot be considered to be waste which means that their fate may be decided even after a 50-year long storage. Experts currently consider 32 areas above the ground and 49 underground ones to be best suitable for storing but surveying still continues.

Local governments which permit the storing of waste in their vicinity can expect tax allowances, infrastructural development and jobs. However, if not one local government agrees to the creation of waste grounds, the Paks Atomic Power Station will be forced to expand, temporarily, its own storage capacity and the problem of finding places to store the radioactive waste will be left to the next generation. [end recording]

ROMANIA

Article Claims Northern Rivers 'Excessively' Polluted

AU0801165495 Bucharest ADEVARUL in Romanian
28 Dec 94 p 1

[ROMPRES report: "Cyanide Found in Somes, Cavnic, and Lapus Rivers"]

[FBIS Translated Text] The Somes, Cavnic, and Lapus Rivers, and particularly the Sasaru River that crosses the locality of Baia Mare (Northern Romania, Maramures County), are excessively polluted along extensive stretches. The metallurgical and mining industries and local land management activities are the major sources of the pollution of these rivers in Maramures. Through the mining activities alone, over 26 million cubic meters of waste water is being discharged, in addition to the about 2,000 metric tons of slurry, 22,000 metric tons of residues, 25 metric tons of copper, over 6,000 metric tons of zinc, and 26 metric tons of cyanide. Mr. Ioan Gherches, director of the Environment Protection Agency in Baia Mare, informed us that the companies guilty of polluting the rivers consider that it is much cheaper to pay the penalties than to take firm measures to stop or prevent the pollution of these rivers.

SLOVAKIA

Mochovce Construction To Go Ahead Even Without EBRD Loan

AU1901132195 Bratislava PRAVDA in Slovak
18 Jan 95 pp 1, 2

["CTK, TASR, Ir"-signed roundup: "Our Power Industry Representatives Want a Public Assessment, Even Though They Will Not Participate in the Vienna Event"]

[FBIS Translated Excerpt] Vienna/Bratislava—[passage omitted] The completion of the half-finished nuclear power plant in Mochovce is economically advantageous for Slovakia. This is a conclusion from project studies worked out by the authors of the documentation as well as by independent consultants—the British-American Putnam Hayes and Bartlett (PHB) company, which evaluated the means of achieving the lowest costs; the British AEA Technology firm, which assessed the environmental impact; and Riskaudit, a German-French joint venture for monitoring nuclear

safety. Representatives of Slovenske Elektrarne [Slovak Energy Company, SE] Bratislava and Electricite de France [EDF] briefed reporters on these studies at a news conference in Bratislava yesterday.

The completion of the nuclear power plant in Mochovce is a solution that is 30 percent cheaper than any other alternative [for securing the same amount of electricity]. PHB representative Mike Egan said that the project of the Mochovce power plant is fully in compliance with international and European standards.

Level of Safety Will Not Be Reduced

Rudolf Kvetan, vice chairman of the SE Board and director for the company's property holdings and joint ventures, cannot envisage a balance between the production and consumption of electricity in Slovakia without Mochovce. Even if the European Bank for Reconstruction and Development, the European Union (Euroatom Fund), and French and German institutions that finance exports refused to provide the expected credit of 1.1 billion German marks, which is at present only a theoretical possibility, Slovakia would have to complete the nuclear power plant in Mochovce. But, even in such a case, its completion would not be at the expense of raising its operational safety. And if Slovakia did not obtain the expected credit, it would have to operate

the units of the Jaslovske Bohunice nuclear power plant, at the very least, up to the end of their service life. [passage omitted]

[Bratislava SME in Slovak on 18 January on page 2 carries an 800-word "asa, CTK"-signed report entitled "Submitters of the Mochovce Project Say They Want To Participate in a Public Debate, Not in an Event." SE executive Karol Bodorik is reported as having said at the above Bratislava news conference: "Karol Bodorik repeatedly declared that the two parties concerned, that is, SE and EDF, are ready to participate in a public debate on the project with the Austrian public in the presence of about 200 people—representatives of the Austrian public, Austrian nongovernmental organizations, and regional bodies. They leave the selection criteria up to the Austrian side. Should the Austrian side insist on a debate among experts, the Slovak side even agrees to such a debate being held, but not within the framework of the meeting with the public. The Slovak side proposes that the meeting take place at any time in February, that is, prior to 17 February when the public debate on the project ends. Both the SE and the EDF refuse to participate in an event involving 3,000 people and representatives of worldwide international environmentalist organizations when a discussion with the Austrian public is supposed to be involved."]

REGIONAL AFFAIRS

Southern Cone Environmental Issues

PY0901234795

[FBIS Editorial Report] The following is a compilation of reports on environmental issues monitored through 23 December.

Argentina

Approximately \$200 million has been invested in Argentina to reforest nearly 800,000 hectares over the past few decades. It is estimated that 65 million hectares are covered with native forest, of which only 15 or 20 million hectares can produce lumber. There are over 800,000 hectares of cultivated forest, of which 50 percent is coniferous, mainly pine, 30 percent eucalyptus, and 20 percent willows and poplars, used mainly for lumber. The area of cultivated forest has increased in the past three years by approximately 25,000 hectares per year. The degradation of the natural forest ecosystems has caused a drop in production capacity, which is relatively compensated for by an increase in the production of cultivated forests. (Buenos Aires NOTICIAS ARGENTINAS in Spanish 1259 GMT 6 Dec 94)

Brazil

A survey conducted in Antarctica by the Sao Paulo University Oceanographic Institute has shown that the region is contaminated with pesticides like DDT and BHC. The survey, begun in 1989, is the result of five years of continuous evaluation of samples in the region. Researcher Walkiria Laria stated that the contamination affects algae, fish, penguins, seals, and skuas, a predatory bird. She noted that the contamination levels are very low, on the order of one part per billion, and "there is no evidence that this quantity could pose any problem to the ecosystem." (Sao Paulo GAZETA MERCANTIL in Portuguese 6 Dec 94 p 13)

On 5 December President Itamar Franco and the World Bank signed an agreement on the disbursement of \$20 million from the Fiduciary Fund. This fund is maintained by the Group of Seven member countries to implement environmental prevention programs in the Legal Amazon region. These resources are part of a global program worth \$200 million, designed to implement 12 programs. A total of \$15 million has been already disbursed. The money will be used to strengthen the state organizations and to support the activities of the Strategic Affairs Secretariat in ecological areas. (Sao Paulo GAZETA MERCANTIL in Portuguese 6 Dec 94 p 3)

Chile

Congressmen from the rightist parties and the Coalition of Parties for Democracy have reported the irregular sales of hundreds of hectares of native forest in the country's Twelfth Region. Deputies Alejandro Navarro, Guido Girardi, and Andres Chadwick said that these sales began during the military regime and continued under President Aylwin's administration. The forests located in Tierra del Fuego were sold at very low prices. They noted that the initial price was 150 pesos per hectare in 1985, and provided details on some of the lands that were sold, as in the case of plot No. 10, measuring over 85,000 hectares, which was sold by the state in 1990 for \$184,350. One year later the buyer sold it for over \$3.5 million, which was the

real commercial price. (Santiago Television Nacional de Chile Imagen Internacional in Spanish 0000 GMT 23 Dec 94)

Peru

The Peruvian and Bolivian Governments and the OAS have agreed in Washington on a project designed to preserve and promote the ecological development of the Titicaca Lake region. It will be implemented over an area of 40,000 square kilometers, and will benefit some 2 million peasants and indigenous tribe members. Some 70 percent of the population of the area live in rural zones severely affected by natural disasters such as frost, hail, floods, and drought. The project is designed to carry out an environmental zoning of the Titicaca Lake System, and to prepare a program of environmental management for the area. (Lima LA REPUBLICA in Spanish 8 Dec 94 p 17)

Peasants coming down from the hills are day by day depredating greater and greater areas of forest and agricultural lands in the zone of Satipo, exploiting the wood irrationally because of a lack of control or management. The virgin forests of the Rio Negro, Mazamari, and San Martin de Pangoa Districts have thus been converted into deforested areas. These districts, located some 600 to 700 above sea level and recently created, already show signs of their bad management by the settlers, who are jeopardizing the very future of the region. Architect Orlando Santos notes that the settlers cut the best trees, such as cedar and mahogany, with no control. They also burn huge areas of forest in order to grow coffee, cocoa, and fruit trees. (Lima EL COMERCIO in Spanish 27 Nov 94 p A25)

Paracas Mayor Alberto Tataje Munoz has asked President Alberto Fujimori and Congress to declare the National Paracas Reserve in a state of emergency due to the high levels of contamination in Paracas Bay, which is having devastating effects on the marine fauna. He reported that the reserve is seriously threatened by the domestic and industrial wastes that are dumped into the sea with no treatment whatsoever, and by the depredation of sea species. He said that gases are contaminating the atmosphere and the entire lower part of the Pisco River. He added that another problem is the cleaning of fishing vessels, which involves toxic substances that are also dumped into the sea. (Lima EXPRESO in Spanish 10 Dec 94 p A13)

BARBADOS

Marine Biologist Urges Governments To Restrict Fishing

FL0601174395 Bridgetown CANA in English
1441 GMT 6 Jan 95

[By Julius Gittens]

[FBIS Transcribed Text] Bridgetown, Barbados, Jan. 6, CANA—An independent fisheries consultant says there has been so much overfishing near Caribbean reefs and shores that governments need to take the "tough decision" of prohibiting fishing in some areas.

Barbadian Robin Mahon says small-scale canoe and small boat fishermen have been exploiting near-shore reef fish for many decades which has taken a heavy toll. "If the resource was allowed to rebuild to the point where it was producing what we refer to as its maximum sustainable yield then it would be providing a lot more in terms of food and also marketable

product for the benefit of the country. The big problem is that in order to allow that rebuilding one has to reduce the amount of fishing," said Mahon, a marine and fisheries biologist, in an interview with CANA.

The fisheries resources which live around the reefs of Caribbean islands are heavily exploited by small-scale fishermen for the restaurant and dinner tables of tourists and nationals alike. Conch and lobster are also disappearing from reefs and becoming more expensive. "Reef fish ... like snappers and grunt, and they have many different common names all around the Caribbean, but the smaller pretty fish that you see on the reef are exploited mainly by fish traps, occasionally by spear fishermen and so forth," Mahon said. "We also have conch and lobster, the two most valuable kind of resources that are found in the near-shore area."

Mahon said tough decisions need to be made to manage near-shore fisheries and that includes stopping fishing altogether in some areas. "Clearly, it's going to be politically very unpopular to tell people who are making their livelihood from their resources, particularly very poor people, that they can no longer do that, that they have to stop fishing. As a result of that, it's been very difficult to get governments to take action to reduce fishing to allow the fish and conch and lobster population to build back up."

"In places like Jamaica, with high populations and fairly small shelf-area this exploitation has been very intensive and the reef fish populations are severely depleted as well as lobster and conch on the island shelf," Mahon added.

Belize, the Bahamas, the Antigua-Barbuda shelf and the area surrounding British Virgin Islands—area of expansive reef—are not yet over-fished, he added.

Mahon has also noticed that with the increased emphasis on tourism, conflicts are emerging between the fishing and the tourist industry. "Divers and submarine operators and tour operators, glass bottom boat operators want to take tourists out so that they can see fish and there's a conflict between these two sectors," the marine and fisheries biologist said.

Bermuda offers an expensive option to dealing with over-fishing in near-shore areas. Mahon, who was on a Royal Commission on the state of the island's fisheries, said because of the importance of the fish and shellfish to the island's tourism, Bermuda bought out their fishermen to get them to quit their jobs. This cost about 20,000 to 60,000 dollars U.S. per fisherman.

Mahon said fishermen were going further and further out to sea for other kinds of fish, putting more pressure on offshore fisheries shared by more countries, including the so-called pelagic fish—from tuna and billfish to dolphin and flying fish.

He suggested that fishermen stop blaming pollution for the problem and that governments need to take tough management decisions.

CHILE

Illegal Hunting of Sea Lions Reported

95WN0068A Santiago EL MERCURIO in Spanish
25 Dec 94 p C10

[Article by Patricio Gomez Couchot]

[FBIS Translated Text] Concepcion—The population of sea lions in the "Piedra de Loberia" [Sea Lion Rocks] nature sanctuary in Cobquecura Township, Nuble Province, has declined from 6,100 [as published] to 1,700 because of illegal hunting and net fishing in the area.

This was reported by attorney Ariel Orrellana, the regional director of Codeff [National Committee to Defend Fauna and Flora], and Rodrigo Lopez, the biodiversity program director.

They explained that the reduction in the population of the colony of sea lions (*Otaria byronia*) was found after field evaluations were conducted by Codeff researchers in December 1994.

Ariel Orrellana emphasized that the organization's concern had been confirmed by a number of reports from the Cobquecura community made to this environmental organization. He said the sea lion population is constantly subjected to pressures from factors like incidental fishing in areas inside the sanctuary and illegal hunting of sea lions. "Given that situation, our researchers have been conducting field studies supported by ongoing aerial monitoring in the sector," he said. He recalled that on 5 August 1992 that sea lion colony was declared a nature sanctuary by a supreme decree of the Ministry of Education.

Rodrigo Lopez reported that the census which Codeff conducted in 1991 in order to have the Cobquecura sea lion preserve declared a nature sanctuary estimated the sea lion population at approximately 2,000 [as published]. "Now, even though this is a protected area, the sea lion population is declining dramatically. Recent surveys conducted in December determined that the present population is close to 1,700."

The Codeff directors said that if the factors cited above continue, the future survival and numerical recovery of the Cobquecura sea lions and other marine species that inhabit that area will be seriously threatened. They indicated that it is also important to point out that the significant amount of tourism attracted to observe the wildlife and scenic beauty protected by this sanctuary "may be adversely affected if these threats are allowed to persist." They added that given the lack of an organization capable of taking responsibility for the management and protection of areas of scientific interest like these sanctuaries, "the state organizations responsible for the Eighth Region's natural resources should take the steps necessary to protect and monitor Piedra de Loberia and the 250-hectare marine area included in this nature sanctuary."

The Cobquecura township has a population of slightly over 6,000, which rises substantially during the summer when thousands of people come to watch the sea lions. It is estimated that the influx of tourists will increase much more when the road to this township is paved. That will be done between January and February 1995.

Figures on Native Forests Analyzed

95WN0068B Santiago LA NACION in Spanish
9 Dec 94 p 3

[FBIS Translated Text] Forestry statistics are a complex issue that allow room for multiple interpretations.

The official figure of the Forestry Institute of Corfo [Production Development Corporation] is 7.5 million hectares

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of native forests. This figure has not changed in the last 15 years, even though the industrial exploitation of Chile's woodlands has grown impressively.

This has led some experts to say that "in addition to being lovely, our native forests possess magic properties; neither their surface area nor the trees they contain has diminished, despite their exploitation."

Export figures for native woods show that in the last six years, 7,878,700 tons of wood chips have been exported.

Thousands and thousands of cubic meters were exported in 1993, including woods of our natural monuments: *araucaria* [monkey puzzle tree] and *alerce* [larch]. This wood sawed into planks was exported primarily to Argentina, Japan, Europe, and the United States. But that volume was not deducted from the official statistics.

"People continue to issue forestry management plans and authorize the entry of multinational capital to conduct industrial harvesting of our native forests, as if they were eternal. Above all, this strange manner of maintaining national accounts allows certain forestry businesses to hide behind these spurious figures and attack what they call 'fundamentalist environmentalism,' when there are protests against the unreliable statistics," report the Defenders of Chilean Forests.

More Contradictions

A study by Professor Harald Schmidt says that "the present rate of destruction of the forests is low": 10,000 hectares are estimated to be lost annually through the replacement of forests with tree plantations; it is estimated that 3,500 hectares are cut to convert forest into agricultural or cattle raising lands; and 100,000 hectares deteriorate because of the decline in the productive capacity of native forests. The total amount of annual losses would then be estimated at about 113,500 hectares. If that is multiplied by the trend observed in the last five years (when the boom in wood chips and the replacement of old-growth forests by rapid-growth plantations began), we can deduce that 577,500 hectares have been lost.

Another recent document, the "Forestry Action Plan for Chile" released by the Ministry of Agriculture (1993), states that there are estimated to be 17.9 million hectares "suitable for forestry development," of which 9.6 million are estimated to be covered with native forests.

So it is evident: that before legislation is passed, reliable statistics will be needed. If the survey is delayed for three or four more years, there are two options: either to make a rapid diagnosis in a meeting in which everyone knowledgeable about forests may participate, or to halt the process of the rapid deterioration of this resource.

ECUADOR

Biodiversity Master Plan Receives \$10 Million

95WN0067A Quito EL COMERCIO in Spanish
12 Dec 94 p 2

[Article: "Project to Finance Three Institutions: \$10 Million for Eight Protected Areas"]

[FBIS Translated Text] The GEF [Forestry Studies Group] project seeks to protect biodiversity in Ecuador. A total of 35 activities are to be carried out.

Biodiversity in Ecuador is one of the highest in the world. The figures prove this. There are about 25,000 plant species in the country. There is a total of 1,559 varieties of birds.

Peru has 13,000 plant species and 1,705 types of birds. Taking into account the difference in area of the two countries (Peru covers 1,285,215 square km; Ecuador covers 275,800 square km.), the natural richness of Ecuador in plant and animal species is clear.

With the objective of preserving this kind of wealth the "Master Plan for the Protection of Biodiversity" is being carried out in Ecuador. The principal purpose of this project is to protect this wealth.

To do this, improvements are being made in the administrative capabilities of the protected areas, their planning, and sustainable management. Efforts are being made to include the communities located in these protected areas.

In large part the financing of the project is being handled by the World Bank, which has earmarked \$7,512,436 for the purpose. The Ecuadorian Government has provided \$1.5 million. The United Nations Development Program (UNDP) has provided \$100,000.

The total estimated cost of the project is \$9,112,436. The balance of \$887,564 is still being negotiated to bring total available resources to \$10 million. The project is to last for five years.

The GEF project is to cover 35 separate activities in the National System of Protected Areas. Expenditures are to be authorized by the UNDP.

One principal task is the strengthening of the Ecuadorian Institute of Forests and Natural Areas and Forest Life (INEFAN). This organization administers the natural areas. At the same time it is in charge of implementation of the project. For this purpose the Project Coordination Unit was established. Enrique Laso was appointed its coordinator.

Furthermore, a consulting biologist, a specialist in social affairs, and two secretaries have been included in the project.

Ximena Ortiz, a coordination assistant, has said that the first thing done was the establishment of the Project Coordination Unit.

At present management plans which INEFAN will carry out are being evaluated. The objective is to condition the implementation of the plans to actual needs and requirements.

NICARAGUA

Environment Projects Completed in 1994

95WN0059A Managua EL NUEVO DIARIO in Spanish
5 Dec 94 p 13

[Article by Judith Vanegas]

[FBIS Translated Text] The completion of the inventory of sources of pollution in the Departments of Carazo, Matagalpa, and Chinandega, and the Municipality of Tipitapa, is

one of the environmental achievements of the Ministry of Environment and Natural Resources (Marena) during this year of 1994.

Also included is the preparation of the proposed "Waste Water Environmental Guide," the "Environmental Permit Application Instructions and Form," and the first draft document on "Environmental Protection Standards for Solid Waste Management."

Another Marena achievement, through the Directorate of Environment and Water Resources, was the preparation of the Map of Vulnerable Zones in the eastern area of the Managua aquifer.

Gains in the Forest Area

The Marena is executing 30 conservation and development projects, classified as social forestry, environmental, institutional reinforcement, conservation, and research projects.

Among the principal activities that it has carried out are the educational campaigns for fire prevention and control, plant production, and training in different areas, implemented in nearly all the projects. Outstanding work has been done through the Western projects, the Northeastern forest project, and the Atlantic fire prevention project, as well as nearly all those for plant production, and the National Forest Service (SFN) regulation and control effort.

One of the main quantifiable achievements is the planting of 20,000 hectares of forest plants, thanks to the activation of the 30 public investment projects being executed.

A Total of 11.605 Million Plants Produced

In addition, 11.605 million plants were successfully produced, including forest, energy, and fruit types, which have been used to reforest various sections of the country.

Another achievement was the preservation of 278,926 hectares as protected areas. An inventory was taken of 105,000 hectares of woods, and 48,519 hectares of woods were placed under sustainable management.

In the Real Estuary, the DANIDA [expansion not given]-Mangrove project completed the forest inventory on 525 hectares of mangrove swamps; and ADFOREST [expansion not given] finished the updating and stratification of 107,785 hectares of pine tree stands in the RAAN [North Atlantic Autonomous Region].

Also realized was the rehabilitation of 644 kilometers of roads, while, in the forest management area, 1.612 million feet of sawed wooden boards and 167,941 feet of planed wooden boards were produced.

Environmental Education and Training

Energetically undertaking the creation of environmental awareness and education, the ministry provided service to 20,000 students, through environmental education activities, and 9,880 training sessions were held, involving both technicians and producers.

Service was given to 300 schools, to promote and develop the establishment of plant nurseries, school garden plots, and theoretical instruction, with teaching materials prepared through the projects, following coordination with the MED [Ministry of Education].

Furthermore, 36 Municipal Ecological Brigades (BEM) were sworn in, and eight BEM Councils were formed, in the municipalities of San Rafael del Sur, San Juan de Oriente, Catarina, Masatepe, Diria, Niquinohomo, Diriomo, and Nandasmo. Their purpose is to coordinate and support activities being carried out by the different brigades, depending on the territory's requirements.

According to the Marena Planning Directorate, the training of human technical and productive resources is one of the most important accomplishments contributed by the projects, because it enabled communities to participate in identifying local priority problems in the forest and environmental areas, as well as possible solutions.

This municipal participation is allowing action to be taken aimed at contributing to improved and increased production in the territories.

The public investment projects being implemented by the Marena have directly benefited 134,619 peasant families, generating 14,218 jobs this year, according to the data supplied by the Directorate of Project Planning and Monitoring.

Limitations During the Period

The country's northern and western regions were afflicted by the drought; hence, it proved impossible to establish the planted areas scheduled for the year. Only 58 percent of them were completed.

The war conflicts in certain areas, such as Nueva Segovia and Muelle de los Bueyes, have impeded some of the scheduled activities.

The absence of a strategy for interinstitutional cooperation (MAG [Ministry of Agriculture], INTA [National Institute of Agrarian Reform], Marena, and townhalls), specifically with respect to cooperative action in the rural areas, caused duplication of efforts and resources, both financial and human.

The winter has precluded 100 percent fulfillment of the projects, owing to the poor condition of some of the feeder roads, as in the case of Prodefor [Forest Development Project], Si-a-Paz [Integrated System of Protected Areas for Peace], and the Northeast Forest Project.

PERU

National Environmental Council Created To Coordinate Policy

PY1001232095 Lima *EL COMERCIO* in Spanish
23 Dec 94 p A1

[FBIS Translated Text] The creation of the National Environmental Council [Consejo Nacional del Ambiente—Conam] has been labeled an important step toward strengthening the preservation of our environment and its great natural resources.

"I believe it is an important achievement, because common actions can be integrated to solve the various environmental problems," said engineer Maria Cuadros, director of the Environmental Department of the Fisheries Ministry.

She mentioned the case of Paracas Bay, which has contamination problems that from this point on should be resolved by Conam, with a view to preventing its destruction.

According to Law 26410, the National Constituent Congress promulgated the National Environmental Council Law, which created Conam as the organization in charge of national environmental policy. One of its tasks is to carry out the planning, promotion, coordination, and control of the country's natural resources.

It will also coordinate actions with the central, regional, and local governments on environmental issues in order to harmonize these with established policies.

Conam will establish the general guidelines for environmental quality, and will coordinate with the various sectors the establishment of permissible limits for the protection of the environment.

TRINIDAD & TOBAGO

Editorial Expresses Qualms About Environmental Agency

FL1701155295 Bridgetown CANA in English
1400 GMT 17 Jan 95

[FBIS Transcribed Text] Port of Spain, Trinidad, Jan. 17, CANA—Following is the text of the editorial of Thursday's TRINIDAD GUARDIAN newspaper:

"Critics of the bill now before the senate drafted to protect the environment may well be right, the powers proposed for the Environmental Management Authority (EMA) appear to be quite strong. Moreover the three bodies to be established are responsible in their operations to no higher authority.

Passed into law the provision could strike fear in the hearts of most if not all the major manufacturers and industrialists and ensnare in its net a vast number of small enterprises. For the EMA will be responsible for the life and death of a plant which it perceives to be polluting the environment. Moreover its decisions except on points of law appear to be unappealable except to an adjoining commission. No one doubts the need for a bill which seeks to make the air above Trinidad and Tobago breathable and without ill effects to preserve the quality of the rivers, streams and coastal waters and to protect the resources of the land from indiscriminate pollution.

There has been indeed an ongoing debate about a multitude of environmental problems, about smoke, ash and effluent pollutants from factories about lead laden fumes issuing from thousands of motor vehicle exhausts, about the improper disposal, about the use of toxic pesticides by food crop farmers about the breakdown of WASA [Water and Sewerage Authority] treatment plants and the spillage of raw sewerage into coastal waters, about illegal quarrying and sand mining in various parts of the country and about the invasion of rice farmers into protected sanctuaries.

Yes, the litany of environmental woes is long, painful and sadly ignored.

So where must we start?

The government in its wisdom has asked parliament to approve such measures as registration of sources from which pollutants may be released into the environment and the characterisation of such sources. Without penalties, these and the other provisions in the bill would be useless. And perhaps aware of the lengthy delays in the courts, the legislation gives the authority

the whip. The authority can make its own rules and regulations, it can impose fines including 5,000 dollars a day for continuation of what it judges to be an offence. In other words the authority would be in a position to shut down a business which it felt was not doing enough to protect the environment.

Perhaps the lawyers will not let the government get away with this kind of legislation. But it will take time and money to go to the courts for protection from what may turn out to be the over zealous or heavy hand of the authority.

Another problem is the bill does not appear to give a grace period for plants to put their houses in order, that the authority once created could take action against a perceived offender forthwith.

The government must be careful not to let loose what one senator described as a "runaway horse" and as the bill comes before the house, it is expected that some measure of accountability be established for the operations of the complex of bodies being established by the bill."

Foreign Minister Protests Planned Nuclear Waste Shipment

FL0801201695 Bridgetown CANA in English
2039 GMT 7 Jan 95

[FBIS Transcribed Text] Port-of-Spain, Trinidad, Jan. 7, CANA—Trinidad and Tobago will protest against a shipment of highly radioactive nuclear waste which the environmental group Greenpeace International says is scheduled to pass through the Caribbean next month on a journey from France to Japan, according to foreign affairs minister, Ralph Maraj. "We're going to make loud and vociferous noises about this nuclear waste vessel. We intend to clamour very loudly against the proposed shipment. We don't want this in the Caribbean at all," he said. He has also indicated that he would be meeting with officials of the Greenpeace when they arrive here next week on a mission to warn Caribbean countries about the shipment of nuclear material.

According to Greenpeace, this particular transshipment contains a cargo of 3,200 glass cylinders of radioactive plutonium waste.

The Caribbean Association for Feminist Research and Action (CAFRA), which maintains communication with Greenpeace, said the Greenpeace Caribbean tour is intended "to not only raise public awareness about this particular shipment, but also about the 100 or so other similar transboundary shipments expected to take place through the Caribbean between now and the year 2010".

Maraj, who spearheaded a 1992 Caribbean Community [Caricom] protest against a plutonium shipment, recalled that "Caricom governments at their summit that year took a very strong stand against this and eventually wanted to approach the United Nations about it."

CAFRA has also said that "given the growing awareness in recent years of environmental degradation/sustainability, we think that a strong Caribbean public opinion on the issue is necessary to support the initiative to make Latin America and the Caribbean a toxic trade free zone."

Latin American coordinator for the nuclear campaign, Ray de Goes, has also issued a note of warning: "Action is necessary to stop these deadly shipments through the Caribbean."

INDIA

Tax Lifted on Devices To Phase Out Ozone Depleting Matter

*BK1801134295 Delhi THE PIONEER in English
13 Jan 95 p 4*

[FBIS Transcribed Text] THE CENTRAL Government on Thursday took a major step towards environmental protection when it announced the abolition of customs and excise duty for the import of technology for phasing out Ozone Depleting Substances (ODS).

The ODS, responsible for causing a hole in the ozone layer, are to be phased out by all signatory nations of the Montreal Accord. While the stipulation for the developed countries was to phase out such substances by 1995, the developing countries are expected to get rid of them by the 2010.

The present concession comes in the wake of Environment Ministry's apprehensions that the Indian industry was fighting shy of shifting to new technology.

While the Montreal Accord had earmarked certain funding for the changeover to new technology, the local refrigeration industry had shown a less than enthusiastic response towards the change-over.

A separate notification by the Government under the Customs Act 1962 and Central Excise and Salt Act. 1944, however, clarified that such exemption would be subject to the condition that "the project for substitution (of Ozone Depleting Substances) has been approved by the Steering Committee set up in the Ministry of Environment and Forests for the clearing of projects."

The notification also states that the importer will have to furnish, in each case, a certificate from the Environment Ministry that goods are required for the changeover to new technology.

India is a signatory to the Montreal Protocol to save the Ozone layer from depletion and is committed to phasing out the ODS, including chlorofluorocarbons, halons, methyl chloroform etc.

The Protocol has set up a Multilateral Fund to provide finances and technology to the developing countries to phase out the ODS. The fund provides project-specific aid, but does not finance costs such as taxes and duties.

IRAN

Manafi on EPO's Plans To Cut Pollution

*LD1201093395 Tehran IRNA in English
0650 GMT 12 Jan 95*

[FBIS Transcribed Text] Tehran, Jan. 12, IRNA—Legislative obstacles have to be removed in order to combat

pollution which is seriously threatening public health, said vice-president and chief of the Environment Protection Organization (EPO), Dr. Hadi Manafi.

Manafi, in an interview with IRAN NEWS printed Thursday, said a new anti-pollution law was approved last month and directives for its implementation are expected to be approved by the cabinet within the next two months.

He added that according to the new law, every generating activity which pollutes the air, including vehicles, factories, workshops, power plants, commercial and residential area must adhere to EPO standards. He further said that failure to comply, will result in vehicles being removed from service and production suspension at factories. Manafi specified that 65 percent of the pollution in Tehran is produced by vehicular exhaust, 24 percent is generated by industries and service centers and 11 percent is attributable to home water heaters.

He added that the officials concerned have drawn up plans to reduce pollution to a minimum and government departments and organization, particularly the municipality, must cooperate with the Environment Protection Organization to implement this. He continued by saying "a number of projects to purify the environment are being implemented in large cities such as Tehran, Esfahan, Shiraz, Tabriz and Arak, which are badly polluted." With this law in hand, he said, all previous hurdles that prevented the government from acting against violators of environment standards will be effectively eliminated.

Meanwhile, Manafi revealed that a 300-billion-rial budget has been allocated to EPO project to perform the law. Of course, he added that this project requires more funding but, due to limitation in the state income, the project should be performed within the framework of the budget.

"Japan and Germany have been cooperating with us to reduce air and water pollution specially in Tehran and we hope the World Bank will assist us in improving the quality of air in polluted towns," the vice-president commented. Also, he added, Iran is going to execute a project with the cooperation of the Central Asian states in the Caspian Sea area to prevent further pollution of the waterway.

Manafi noted that a similar campaign has been going on from some time ago with the cooperation of the Persian Gulf littoral states.

Environment protection does not recognize borders and all countries must cooperate to eliminate the potential for catastrophe that threatens the living environment, he added.

RUSSIA

Nuclear Subs Awaiting Scrapping Pose Ecological Threat

95WN0065A Moscow IZVESTIYA in Russian
29 Dec 94 p 5

[Article by Natalya Ostrovskaya, IZVESTIYA correspondent reporting from Maritime Kray: "Time Bomb at Rakushka"]

[FBIS Translated Text] Rakushka. That is the name of a town on the shore of beautiful Vladimir Bay in Maritime Kray. Besides the remote town, forgotten by God and the rest of the world, these shores are also home to another site that is definitely not in harmony with the natural landscape: a Pacific Fleet nuclear submarine base. Incidentally, who actually owns the seven former warships now slated for dismantling is a tricky question. After the vessels are decommissioned, it seems that they belong to no one. Do the sharp traders at the Ministry of Defense have any use for a rusty heap of radioactive metal, anyway? And so they remain ownerless. But it is the Pacific Fleet that is responsible for the condition of vessels. And it will take the heat if something happens.

"For Purposes of Unsinkability the Vessel Has Been Grounded"

That is an almost verbatim quote from a document entitled "Assessment of the State of Nuclear and Radiation Safety at the Pacific Fleet Nuclear Submarine Base in the Town of Rakushka." The assessment was compiled and signed by specialists from a kray interagency commission in June of this year. Among other things, it contains this sentence: "All possible measures should be taken to transfer these ships to disassembly stations for the purpose of off-loading radioactive elements and subsequent scrapping within the shortest possible period of time." That period has clearly long since expired, and one of the nuclear submarines, No. 181, remains grounded at the bow "to ensure its unsinkability."

And so seven reactors on board the massive submarines (each has a water displacement of 9,000-10,000 metric tons) now reside near human beings and without anyone's supervision whatsoever. No one can say what is happening inside the submarines so long after they were decommissioned. If things had been done properly, the "radioactive elements" should have already been loaded onto special trains and sent to a reprocessing facility. That would have removed a little bit of nuclear hazard from Maritime Kray. But only a little bit, because Rakushka is by no means the only potential environmental disaster area in the kray or in the Russian Far East in general. The submarines themselves should be sent to the city of Bolshoy Kamen, where they would be scrapped at the Zvezda Plant.

Who should carry out all these operations? The Pacific Fleet, of course. Why does it not? Because it does not have the money.

"The fleet command is in no way to blame for this," was what I heard at the offices of the kray committees on environmental protection and natural resources, as well as from Valeriy Maslakov, director of the Zvezda Plant. Indeed, is the fleet to blame for the fact that in Rakushka,

like everywhere else, there have been cutbacks, as a result of which the radiation laboratory has been eliminated, there is no one to monitor radiation levels, and the radiologist's position has been eliminated? It would appear that there is not even anyone to guard the facility, since the aforementioned commission, comprised of approximately 10 members, walked through base checkpoints unchallenged.

In the six months that have passed since the interagency commission did its work, new strokes have been added to the sinister picture that is broadly titled "Rakushka." For example, electricity has begun to be shut off on a regular basis throughout Maritime Kray since the beginning of the fall and winter frosts. Nor has Rakushka been spared. The backup power system that used to make the base independent of local problems wore out long ago. Military personnel have been forced to heat the submarines compartments with the help of store-bought electric appliances and homemade heaters. When these heaters are shut off by the will of the kray authorities and the Dalenergiya Joint-Stock Company, kerosene lamps and candles are used. Fire safety, the units rightly conclude, is a trivial matter compared to nuclear safety, unless of course an accidental fire (a distinct possibility) causes a reactor to catch fire.

One month ago (on 29 November) Konstantin Kuchenko, interim chairman of the kray Environmental Protection Committee, made the following request in a written appeal to Maritime Kray Administration chief Yevgeniy Nazdratenko: "...to direct attention to and provide assistance with urgent measures to deal with the extremely negative situation at the Pacific Fleet's nuclear submarine base in the town of Rakushka." It is likely that Kuchenko felt that putting an end to the shutoffs of electric power to the Rakushka base was one of the more urgent measures the kray administration could take. However, Konstantin Kuchenko's letter—a voice crying in the wilderness—disappeared into the depths of the kray administration's offices.

The story of Rakushka also includes another negative factor with a possibly apocalyptic outcome: nature. When in October 1994 an earthquake shook the Kuril Islands, the underground shock waves were accompanied by the waves of a tsunami as well.

"The Kurils took the whole blow," muses Sergey Lishavskiy, chief of the Environmental Protection Committee's Radiation Safety Monitoring Division. "But what would happen if a tsunami reached our shores?" It was then that we both recalled how a decade ago Olginskiy Rayon was severely damaged by a huge wave. The very rayon, on the coast of which the Rakushka base, with its special principles for ensuring the unsinkability of nuclear submarines, is located.

Greenpeace's Clumsy Help

When a little over one year ago Greenpeace, outraged over certain Pacific revelations, sounded the alarm over the dumping of liquid radioactive waste from Pacific Fleet submarines in Zone No. 9 in the Sea of Japan, people who follow the fleet's problems (read: the environmental problems of Maritime Kray and surrounding areas) could only shrug their shoulders uncomprehendingly. In their view the situation with regard to solid waste was much more serious than the liquid waste problem. Unfortunately, coverage of

that issue is still being put off. The unexpectedly delayed report on Rakushka is simply evidence that the situation has become extremely acute. And another odd thing: despite the fact that Rakushka is directly linked with the scandal surrounding liquid nuclear waste dumping, nothing is being said. Not even by normally militant Greenpeace.

For a year and a half now the Pacific Fleet's Chemical and Radiation Safety Service, the Maritime Kray Natural Resources Committee and the Zvezda Plant, not to mention various agencies in Moscow, were busy looking for a solution to the problem, the absurdity of which is illustrated by a quote from the newsletter of the Center for Public Information on Atomic Energy (No 7-8, 1994): "Representatives of Japan's Scientific and Technical Administration and Ministry of Foreign Trade and Industry have confirmed that all 16 Japanese nuclear power plants regularly discharge radioactive wastes into adjoining seas. The total annual amount of radioactivity contained in those discharges is 6,200 curies, an amount which in experts' opinion is fully in line with safety standards. At a 25 October 1993 meeting between S. Eda, head of the Scientific and Technical Administration, and V. Mikhaylov, Russian Federation minister of atomic energy, it was emphasized that the wastes dumped at sea by the Pacific Fleet are only one-tenth as toxic as liquids dumped each year along Japan's own shores by the Kashiwazaki-Kariwa Nuclear Power Station alone."

That same newsletter contains a report on a sensational find made by IAEA inspectors during a scheduled inspection of a fuel-manufacturing plant in Tokaimura (Ibaraka Prefecture). It was there that in April of this year—the very time, we should note, when the ecologically concerned Japanese were conducting inspections of our ships in the area where radioactive liquid waste were being dumped in the Sea of Japan—that 70 kilograms of "unaccounted-for plutonium" were discovered. This would be enough to manufacture seven or eight modern nuclear warheads. The powdered plutonium had spilled onto assembly line equipment and pipes during the six years the plant has been in operation...

Clearly, the accusation that "you're one, too!" is not the most intellectual argument in a dispute, but a fact is a fact: through the efforts of certain interested parties a technical problem on the part of the Pacific Fleet—liquid radioactive waste disposal—became first a political problem, and then an environmental problem for Maritime Kray. When we stopped dumping waste at sea, we started accumulating it in old tankers and leaving it right next door to ourselves and our children. Only now, after more than half of the total amount of impounded liquid radioactive waste has been treated with the help of our Sharya-04 installation, which is domestically manufactured and highly effective, has it been revealed that decommissioned tanker TNT-5, with liquid radioactive waste on board, was grounded (just like nuclear submarine No. 181 today) to prevent it from sinking, that liquid radioactive waste leaked from tanks not only into the engine room, but also overboard, that the isotope composition both inside the tanks and on the harbor floor under the tanker were identical...

It is difficult to conceive, but true: the government dealt with this problem and allocated budget funding as special item No. 6305/7 (utilization of Pacific Fleet nuclear submarines) in a fully adequate amount, yet meanwhile the Zvezda

Plant in Maritime Kray, the only base that can scrap the fleet's submarines, is unlikely to be able to deal with the problem posed by Rakushka. As this IZVESTIYA correspondent was told by Valeriy Maslakov, Zvezda's director, currently the plant has shut down all operations connected with the conversion of liquid and solid radioactive waste. Capacity for storing wastes both at Zvezda and at burial sites, the location of which has not been disclosed, is strained to the limit.

Official hopes of resolving the liquid radioactive waste problem now hinge on charity from Japan and an international tender to develop the best design for a facility to utilize liquid waste. The solid waste problem is presently so hopeless that nothing has been said about it in the past, and nothing is being said about it now. Meanwhile, the commanders responsible for the military units still stationed on Vladimir Bay and in the town of Rakushka are stockpiling light bulbs and other "strategic" materiel. They are depending on themselves. And on nature's mercy.

Security Lacking at Nuclear Weapons Depots

95WP0034A Moscow MOSKOVSKIYE NOVOSTI
in English No 49, 9-15 Dec 94 p 14

[Article by Alexander Bolsunovsky and Valery Menshchikov: "Nuclear Security Is Inadequate and Outdated"]

[FBIS Transcribed Text] One of the authors of this article has just returned from the Siberian Chemical Plant (Tomsk-7) where he went on assignment for Russia's Security Council. In the plant's storage are accumulated 23,000 containers with nuclear materials from obsolete warheads: plutonium and enriched uranium.

It is too early to make final conclusions while a working group of the Security Council continues its study of the matter. But it is clear even now that the situation with the storage of plutonium is extremely unsatisfactory.

Information has been published in the press more than once concerning the theft of nuclear materials and nuclear smuggling. A considerable portion of the published material, but not all of it, proved to be disinformation. In 1992 alone three cases were recorded of attempts to steal nuclear materials (in Podolsk, Glazov and Arzamas-16). This is close to what was recorded during the entire period of the existence of atomic industry in the USSR. In 1993 eleven attempts were foiled to steal uranium from nuclear facilities. Besides that almost 900 attempts were prevented of illegal entry of secret nuclear facilities. In almost 700 cases workers of nuclear facilities tried to carry out secret documents. In the opinion of experts all attempts to steal nuclear materials were made by people who are thoroughly familiar with nuclear technology. The Russian interior troops who are responsible for the physical protection of the nuclear complex try to circumvent various tricks, but the problem of the protection of facilities is complicated by the lack of special control instruments, under-staffing of military units and insufficient training.

What are the reasons for the growing number of attempts to steal nuclear materials? First is the sharp worsening of the economic situation of workers in the system of the Ministry of Atomic Industry (MAI). Pre-strike and strike actions took

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place in 1993 and 1994 both at atomic power stations and enterprises in the defense industry nuclear complex. As a result of the delay of many months for payment of wages it may prove profitable to sell stolen nuclear material and thus improve one's financial position. Discipline has deteriorated in branches of the MAI, including in specialized guard services.

The second reason is the lack in Russia of a system of control, registering and physical protection of nuclear materials which meets modern international requirements. The discussion of this subject before an open audience would have been impossible a year or two ago because of its absolute secrecy. But times change, and an international seminar "Scientists for Nonproliferation of Nuclear Weapons" was held in October of this year at Nakhbino, near Moscow, on the initiative of the Nuclear Society. Participants discussed the problems of registering, control and physical protection of nuclear materials in particular. It became clear from statements by foreign and Russian specialists that our systems of protecting nuclear materials are inferior to modern Western ones on practically all points.

In the opinion of Mr. Izmailov, from the Eleron scientific production association, the physical protection of nuclear materials at Russian facilities also does not meet modern requirements. The main drawback is due to the fact that protection measures were designed only against an outside threat. A lack of funds at present does not allow rebuilding the entire system. It is only possible to change and strengthen the protection of some important parts of a facility. That is why we are very far behind Germany, for example, where the surplus principle of physical protection has been adopted. So far the modern system of physical protection has been introduced in Russia only at two facilities, which are not nuclear ones: in the building of the Russian government at Krasnopresnenskaya Embankment in Moscow and at the Goznak plant.

A system of protection of nuclear materials similar to Western systems is only beginning to take shape in Russia. Whereas previously the production of nuclear materials and their control were carried out within the MAI alone, the functions of supervision of the nuclear fuel cycle have now been handed over to another organization, the State Committee for Atomic Supervision (SCAS). But the stage of reorganization and delimitation of the rights of the two departments, which is still continuing, has not improved the system of control and registering of nuclear materials. What independent check-up by an SCAS inspector is possible today when even operators of installations do not have the technical means for control and registering?

MN File

Given below, for the first time in the Russian press, is a list of institutions and enterprises which urgently require introduction of modern systems of registering, control and physical protection of nuclear materials (the list is not complete).

1. Kurchatov Institute, Russian research center, Moscow. The center has 25 nuclear installations, and its nine nuclear materials stores contain more than 100 tons of natural and slightly enriched uranium. A commission of the SCAS has noted the insufficient level of the systems of protection of

nuclear materials at the center. The center's leadership has made appropriate conclusions.

2. Physics and Energy Institute, Obninsk. The institute has used weapon-grade plutonium in a BR-10 reactor with a total loading of 150 kilograms and a physical stand with a loading of 750 kilograms. There are also other radioactive materials at the institute, which faces serious financial difficulties.

3. V. G. Khlopin Radium Institute, a St. Petersburg scientific and production association. Work is being done with the use of plutonium isotopes and other radioactive materials. In 1993 a commission of the SCAS found a number of infringements.

4-5. Federal nuclear centers Kremlev (Arzamas-16) and Sazhinsk (Chelyabinsk-70). The institutes of the centers have nuclear installations and considerable amounts of fissionable materials for purposes of making the latest armaments. An attempt has been recorded to steal uranium from Kremlev.

6. Zheleznogorsk mining and chemical plant (Krasnoyarsk-26). According to various estimates, the plant has produced during its lifetime more than 40 tons of weapon-grade plutonium in dioxide form. Attempts have been recorded to steal nuclear materials.

7. Siberian Chemical Plant, Seversk (Tomsk-7). This is a site for reactor, radiochemical and enrichment production. Up to 70 tons of weapon-grade plutonium and a considerable quantity of enriched uranium has been produced here. The plant's specialists have concluded that several hundred kilograms of plutonium have been lost without being registered.

8. Mayak scientific and production association, Ozersk (Chelyabinsk-65). As a result of the work of a plant for reprocessing of spent RT-1 nuclear fuel about 30 tons of reactor plutonium has been produced, which is stored in conditions which do not correspond to international safety norms.

9. The Start production association, Zarechny (Penza-19). Assembly, dismantling and storage of nuclear warheads occurs here. The production buildings were constructed during the 1960s and are now obsolete both physically and technologically. The reduction of nuclear armaments has resulted in increased volume of dismantling warheads and storing nuclear components. The physical protection of nuclear materials does not preclude, according to the data of the Federal Counter-Intelligence Service, unsanctioned access to nuclear components of warheads.

Russia Seen As Not Ready to Comply With Basel Convention

95WN0069A Moscow SEGODNYA in Russian
29 Dec 94 p 9

[Article by Aleksandr Belinovskiy, under rubric "Expertise": "Russia Has Everything For Violating the Basel Convention: Even the Concept Itself"]

[FBIS Translated Text] Only two months remain until the deadline for putting into effect in Russia the Basel Convention on monitoring the transborder shipping of dangerous waste products and their removal. The essence of that

document is the ban on importing any dangerous waste products from outside the country. An exception is made only in the event of obtaining an authorization from the highest state agencies. But one would scarcely think that there is anyone who feels that the requirements of the Basel Convention, like those of many other laws, will not be violated.

The first and basic method is to prepare documents identifying the waste products as raw or other materials or components, to change the markings or names of the items being delivered, and to conclude fraudulent contracts. All the conditions have been created for this. The country does not have a uniform system for keeping track of dangerous waste products. None of the documents existing in this area—"Enterprise's Ecological Record Sheet" (GOST-1.0.0.04-90) and state statistical records form No. 2-TP, "Report on the Formation and Removal of Toxic Waste," which was approved by RF Goskomstat [State Committee on Statistics] in June of last year—require the enterprise to indicate specifically where it is obtaining the waste from or where it is sending that waste. That information is also not monitored on the territory of the enterprises themselves, and that kind of monitoring ought to be dual: field (locally) and technological (with the availability of data concerning technological schemes and the overall volume of production of output, consideration is taken of the volume, makeup, and degree of danger of the waste that is formed). A uniform system for locating illegal dumps and testing areas is lacking.

It is necessary within the shortest period of time to introduce a dual-monitoring system, to develop all the reporting forms, and to open up statistics for the mass media and public organizations. Incidentally, such steps are already being taken by people's own efforts in the outlying areas, for example, in Tomsk. Drafts of the appropriate documents have been prepared at the State Institute of Applied Ecology.

The second method for violating the convention has been tested long ago: the enterprises will attempt to prove that the freight shipments that they receive are completely safe and that there is nothing to worry about. There are many examples of this. In January 1994 St. Petersburg received from France a shipment of freight with nickel-cobalt raw materials. In Orenburg, at the processing plant, it was determined that it was toxic thallium. The freight was sent back to St. Petersburg. And there it remains to this day at the warehouse of the Monobalt firm. RF Minprirody [Ministry of Environmental Protection and Natural Resources] is demanding its immediate return to France. So far those attempts have been unsuccessful. Those who receive real money from operations like this will not refuse it.

As is generally known, four classes of danger from waste products are generally recognized—from Class 1, the most dangerous (mercury, chromium, etc.), to Class 4, almost harmless. This is determined on the basis of the Provisional Classifier of Toxic Industrial Waste Products, which was published by USSR Minzdrav [Ministry of Health] and GKNT [State Committee on Science and Technology] as long ago as 1987. Inasmuch as the actually encountered substances can be seen infrequently in this document, the enterprise itself determines which class of danger they pertain to and, naturally, lower that class as much as it can.

The Provisional Classifier is actually poor. The only thing that can help is to have expert evaluations by Gossanepidnadzor [State Sanitation and Epidemiological Inspectorate] or independent expert evaluations (that are recognized in court). Oblast committees on ecology order them and keep the enterprises in their place, but the enterprises, in turn, dispute the results of the expert evaluation in court. And sometimes they win.

Thus, one cannot speak of any insurmountable barriers on the path of criminal shipments into Russia. The ratification of the Basel Convention does not fundamentally resolve the problem. Incidentally, the convention does not stipulate any international inspections of its execution. Russia can only inform the permanently operating secretariat about the violations and demand that they be investigated in the International Court or in a specially appointed court of arbitration. In the event that illegal turnover is detected, the state from which the freight arrived is required to return it to its own territory or to render it harmless within 30 days.

Nevertheless the first step has been taken. The next step will be the approval of the national list of dangerous waste products, the importing and transporting of which across the Russian State Border are completely banned; and the preparation of legislative drafts that stipulate the specific criminal and administration responsibility.

Symposium on Nuclear Contamination Opens in Chelyabinsk

OW1001132795 Tokyo KYODO in English
1306 GMT 10 Jan 95

[FBIS Transcribed Text] Chelyabinsk, Russia, Jan. 10 KYODO—Some 130 experts from Russia, the United States, Japan and Germany opened a three-day symposium in the Russian industrial city of Chelyabinsk on Tuesday [10 January] to discuss the effects of nuclear radiation on humans.

Organized by the Urals Research Center for Radiation Medicine, it is the first international symposium to look into the "nuclear tragedy" of the southern Urals.

L.I. Ilyin, head of the center, welcomed the fact that with the end of the Cold War "it has become possible for the first time to make public data about the nuclear contamination that has been kept secret for more than 40 years."

He expressed hope that the symposium will pave the way for a global scientific debate of the once secret data and international research cooperation.

People near the formerly closed city of Chelyabinsk 65, located 100 kilometers northwest of Chelyabinsk, which houses the Mayak nuclear plant, have been exposed to nuclear radiation for more than four decades leading to a high incidence of cancer and leukemia in the local population.

Due to the contamination, Moscow has granted the region emergency status. The central government's representative in Chelyabinsk, V. V. Panteleyev, told symposium participants that the region's death rate is higher than the birth rate since heavy pollution from the local heavy industry compounds the effects of nuclear contamination.

"We are drawing up a revival program for the Ural region, but since our country's overall economic situation is deteriorating rapidly, it will be difficult to realize," he said.

He also revealed that radiation victims have not received government compensation for their mental and physical damage.

Most victims are workers of the Mayak plant, which was the first to produce plutonium for atomic bombs in the former Soviet Union, and residents along the Techa River, where liquid nuclear waste was dumped.

The Urals Research Center estimates that about 500,000 local residents have been contaminated with radiation.

During three days of discussion, the experts will compare data from the Chelyabinsk contamination, the 1986 disaster at the Chernobyl nuclear reactor in Ukraine and the August 1945 atomic bombings of Hiroshima and Nagasaki.

Urals Radiation 'Unique Research' Results To Be Revealed

LD1001092295 Moscow ITAR-TASS in English
0723 GMT 10 Jan 95

[By ITAR-TASS correspondent Yevgeniy Tkachenko]

[FBIS Transcribed Text] Chelyabinsk January 10 TASS—Scientists from Russia, the United States, Germany, Japan, Austria and some other countries have converged on Chelyabinsk in the Urals to attend an international symposium on human health and radiation, and to hear and discuss the results of unique research projects conducted in Russia and kept secret for forty years.

According to Leonid Ilyin, chairman of the symposium's academic board, the research in question was conducted in the Urals where considerable areas were affected by a variety of radiation impacts. The local radiation medicine research centre and a subsidiary of the National Institute of Biophysics did the research forty years ago.

American scientist Marvin Goldman told ITAR-TASS that specialists still differ on the degree of danger to human health posed by varying irradiation doses.

Scientists across the world have mainly drawn on the data provided by Japanese researchers into effects of atomic bombardments. The Russian data to be made public at the symposium in Chelyabinsk will enable the world scientific community to get a more detailed picture and determine indicators of the degree of risk for human health ensuing from radiation.

Assessment of Ground Water Pollution by Petroleum Products in the Vicinity of an Abandoned USSR Air Force Airfield (Brzeg, Poland)

95WN0062A St. Petersburg VESTNIK SANKT-PETERBURGSKOGO UNIVERSITETA: GEOLOGIYA, GEOGRAFIYA in Russian No 2, Jun 94 pp 93-97

[Article by S. P. Yakutseni, M. A. Galishev and I. Kryza; UDC 556.388:628.543]

[FBIS Translated Text] Hydrocarbons are one of the most widespread environmental contaminants. Because they are used everywhere, their negative effects upon the environment encompass hundreds of thousands of square kilometers. These negative effects are manifested not only in extraction and refining areas, but also at numerous local facilities associated with transportation and sale of hydrocarbons.

One example of this is the situation in the vicinity of a former USSR Air Force airfield near Brzeg. After the airfield was abandoned, a significant quantity of petroleum products remained in the soil and ground water. In this case their concentration on airfield territory was so great that they are being recovered by local inhabitants from shallow pits up to 3 m deep. The airfield was operational back before the war, but now it is no longer important, and local authorities now face the task of revegetating the land. We studied the composition and properties of the ground water in this connection, at the proposal and with the financial support of the Akvator firm. We also assessed the danger of hydrocarbon contaminants to the environment.

In fall 1992 samples were taken from bore holes at the airfield and from wells in neighboring towns by Matsek Klonovskiy. Six holes were tested at the airfield, and four wells were tested in the towns.

The samples were delivered to and analyzed in the United Laboratories of the St. Petersburg A-Ya Society. The concentration of petroleum products in water was established by two methods—infrared spectroscopy using carbon tetrachloride extraction [1], and extraction of organic compounds from water with chloroform together with pyrolytic determination of the quantity of extracted products [2]. The characteristics of the petroleum products themselves were determined by gas-liquid chromatography [3]. The results of analyzing the water for the concentration of petroleum products are presented in Table 1, while the characteristics of the petroleum products are shown in Table 2.

Table 1. Results of Analyzing Water for Petroleum Product Content

Sample Number	Total Quantity of Organic Compounds Extracted With CCl ₄ , mg/liter	Petroleum Products, mg/liter	Proportion of Petroleum Products in Total Quantity of Extracted Compounds, %	Total Quantity of Organic Compounds Extracted With CHCl ₃ , mg/liter	Methane-Naphthene Hydrocarbons, %	Volatile Aromatic Hydrocarbons, %	Heavy Aromatic Hydrocarbons, %	Tars, %	Asphaltenes, %	Methane-Naphthene (Saturated) Hydrocarbons, mg/liter	Total Quantity of Hydrocarbons, mg/liter	Total Quantity of Hydrocarbons With Respect to Total Quantity of Tars and Asphaltenes, mg/liter	Concentration of Visually Detectable Petroleum Products in Sample, % by volume
1	1.1	0.5	45	1.4	38	9	8	19	26	0.5	0.8	1.2	-
2	0.3	Absent	-	3.3	35	8	17	17	23	1.2	2.0	1.5	-
3	0.1	Absent	-	1.1	29	7	8	29	27	0.3	0.5	0.8	-
4	0.1	Absent	-	2.2	26	14	11	29	20	0.6	1.1	1.0	-
5	270	110	41	24	76	2	2	8	12	18	19	4.0	1.3
6	7000	3000	43	Not determined									85
7	0.7	0.5	71	2.7	45	6	5	31	13	1.2	1.5	1.3	-
8	22	9	41	Not determined									55
9	200	85	43	16	77	10	8	5	Absent	1.2	15	19	35
10	0.9	0.8	88	1.7	69	5	5	11	0	1.2	1.3	3.8	-

Table 2. Characteristics of Petroleum Products

Sample number	Density, gm/cm ³	Boiling Point Interval, °C	n-Alkane Concentration Interval	Sample Kerosene Concentration, % by volume
5	0.85	100-270	nC ₈ -nC ₁₃	1.3
6	0.85	100-270	nC ₈ -nC ₁₃	85
8	0.90	100-300	Traces	55
9	0.85	100-270	nC ₈ -nC ₁₃	35

The analyzed water samples differ significantly in content and composition of petroleum products. In four samples the quantity of petroleum products was recorded visually, and was from 1.3 to 85 percent by volume after settling. Detailed analysis of products above the water surface made it possible to establish that they are high-quality aviation kerosenes, with the kerosene make-up of samples No 5, 6, 9 being practically identical, and the kerosene in sample No 8 being slightly different. Correspondingly, the water in samples No 5, 6, 8, 9 contained the largest quantity of extracted organic compounds (EOC) determined by both methods. Petroleum products in the water samples are in dissolved state, but in different quantities. The least are in sample No 8, with a rather specific make-up of fuel floating above the water (Table 1).

The concentration of organic compounds extracted with CHCl₃ in samples No 5 and 9 is lower than the concentration of organic compounds in the samples extracted with CCl₄. This is associated with loss of the volatile fraction of the petroleum products upon distillation of the chloroform. Nonetheless, the concentration of EOC (CHCl₃) in samples No 5 and 9 is an order of magnitude greater than the same

indicator in all other water samples. Their make-up is also very unique, consisting 70 percent of saturated hydrocarbons.

The concentration of petroleum products in all other water samples is significantly lower. There are none in water samples No 2-4, while the composition of EOC contained in them reflects that of organic matter of modern natural origin. Of interest is the high concentration of aromatic hydrocarbons in samples No 2 and 4, and especially of heavy aromatic hydrocarbons in sample No 2. Petroleum products are contained in samples No 1, 7, 10 in quantities somewhat exceeding the maximum permissible concentration for drinking water, which is 0.1 mg/liter. Sample No 10 distinguishes itself especially among them. Although the total amount of EOC and petroleum products it contains is only a little greater than in samples No 1 and 7, the composition of the EOC precisely reflects technogenic contamination both due to the high ratio of petroleum products to total EOC, and due to the high concentration of methane-naphthene saturated hydrocarbons.

Chromatograms of saturated hydrocarbons in fuel samples No 5, 6, 9 are practically identical. They consist of a series

of peaks of normal and iso-alkanes from nC_7 to nC_{13} (in trace quantities to nC_{14}) on a dominant background of cyclic hydrocarbons. The boiling point interval of the fuel samples is also established by gas chromatography, and for samples No 5, 6, 9 this interval is 100-270°C (the maximum quantity of components boils off at 130-250°C). This corresponds to the kerosene fraction together with a negligible quantity of the heavy part of the gasoline fraction. The high proportion of cyclic and iso-alkane structures indicates that these samples are high-quality motor fuel, and in all probability, aviation kerosene.

The chromatogram for fuel sample No 8 has a somewhat different appearance. A broader boiling point interval was established for it—from 100 to 300°C (which corresponds to an n -alkane interval of nC_7 - nC_{17}), with the maximum quantity of components boiling off within 100-280°C—that is, besides the kerosene fraction, this sample contains a large volume of heavy gasoline "tails," as well as the light part of the gas-oil fraction. There are practically no normal paraffins in sample No 8. This fuel probably underwent deparaffination during refining, and is aviation kerosene of higher quality than in samples No 5, 6, 9. Evidently this also explains the presence of the lowest quantity of petroleum products dissolved in water in sample No 8.

Measurement of the density of the fuel samples also shows that products No 5, 6, 9 are very close to each other, the density of each of them being 0.85 gm/cm³. The density of fuel in sample No 8 is somewhat greater—0.9 gm/cm³.

Any assessment of the state of the environment is limited in ecological research to a comparison of detected levels of substances with their maximum permissible concentrations stated in reference manuals, or with tentatively safe levels of influence (OBUV). However, this practice has outlived its usefulness. By 1992, these parameters had been established for less than 5 percent of the compounds used in industry, which increases the probability of mistakes in assessing the environment's toxicological danger. Another possibility for mistakes is associated with difficulties in predicting the joint toxicological action of contaminants. It should be considered that petroleum products, including motor fuels, aviation kerosene and so on, as a rule contain a broad spectrum of inorganic compounds. Not only can they intensify the danger of organic compounds to living organisms, but they themselves also possess toxic, carcinogenic, mutagenic, teratogenic and allergic action.

Some data on toxicological characteristics of compounds within the composition of the analyzed petroleum products are presented below. Their quantity was not determined, but their presence is obvious.

The toxicity of methane hydrocarbons and naphthenes is low for practical purposes in connection with their limited solubility in water and blood. Benzene and its homologues are more dangerous. High concentrations of aromatic hydrocarbon vapor have different degrees of narcotic action. At high concentrations, they cause death. Chronic poisoning leads to severe affliction of blood, hemopoietic organs and the vascular system. The irritant action of benzene grows with increasing number of methyl groups.

It should be noted that a typical feature of the benzene ring—its propensity for substitution reactions, for example

for replacement of hydrogen atoms by a nitro group, a sulfo group and halogens, which is fully realistic when it comes in contact with ground water and soil—raises its toxic danger.

This study permits some interesting conclusions, which essentially reduce to the following:

- 1) Aviation fuel spilled on the airfield's maintenance territory has persisted stably for decades, primarily in the spill area, with practically no biodegradation for at least 3-5 years in a natural sandy environment;
- 2) the depth to which fuel penetrated exceed 4 m. It apparently formed a pillow above ground water located at depths of 2-4 m;
- 3) aviation fuel components that are soluble in water transfer into the water and migrate together with it, reducing the concentration with increasing distance from the source of contamination.

The materials above were presented for a tentative assessment of the possible danger presented by ground water, together with the petroleum products dissolved in it, within range of the airfield contamination source. A more-detailed toxicological characterization of the contaminating components would provide a more realistic picture, but this would require additional research. Nor did we analyze highly toxic metal components in the petroleum products. But their presence in aviation fuel is not obvious. We note in conclusion that ground water in wells near the airfield, especially northwest of it, in the direction of the gradient of its migration, doubtlessly contains petroleum products.

Considering the considerable extent of contamination by petroleum products (not less than 8,000-12,000 m³) and the length of time the contamination source has been in existence (on the order of 40-50 years, with the greatest intensity of contamination falling in the last 10 years), we can confidently suggest that the spot of petroleum product contamination is presently exhibiting a tendency to migrate with ground water toward the principal water intakes of the city of Wrocław.

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Environmental Minister on Oil Fires in Grozny

*LD1001193095 Moscow ITAR-TASS in English
1738 GMT 10 Jan 95*

[By ITAR-TASS correspondent Anna Bakina]

[FBIS Transcribed Text] Moscow January 10 TASS—"Numerous fires at oil-processing plants and oil storages in Grozny are inflicting a serious damage on health of local residents and the environment since they are isolating a strongest carcinogen—benzpyrene," Russian Environmental Minister Viktor Danilov-Danilyan told an exclusive ITAR-TASS interview today.

In his words, the carcinogen is being spread by low temperature, fog, the lack of wind and the emergency situation at plants and storages. Another carcinogenic substance isolated by fires is carbon black.

The Environmental Ministry does not have precise information about the fires because of the on-going hostilities. The minister thinks that "dozens of millions of rubles are necessary to extinguish the fires". All the measures can be taken only after the combat operations are over.

Yablokov on Ecological, Health Dangers in Chechnya

*MK1201140495 Moscow MOSKOVSKAYA PRAVDA
in Russian 12 Jan 94 p 1*

[Unattributed report under the "Competent Opinion" rubric: "God Forbid They Dig Up Livestock Burial Ground With Anthrax!"]

[FBIS Translated Text]

An ecological echo of the Chechen madness as seen by Aleksey Yablokov, corresponding member of the Russian Academy of Sciences and chairman of the Russian Security Council ecological safety inter-departmental commission.

The well-known scientist refrains from drawing parallels between "the war in Chechnya and the Gulf War" thinking that unlike Kuwait, the consequences of military operations in the North Caucasus have a local nature.

"Analyzing the situation, we drew the FCS's [Federal Counterintelligence Service] attention to several main points," Aleksey Vladimirovich told our newspaper. "First, Grozny's industrial zone, where three oil refineries are located, is a danger point. The refineries are very old, especially one of them. The soil around them is soaked with petroleum products. There is information that in some places the soil is thus soaked to a depth of up to 10 meters. We have seen several times on television in recent years that you can get gas for your car from a hole dug in the ground. This is why fires in such places would be even more terrible than in oil storage dumps. Second, Zavodskoy district [in Grozny] has a giant (up to a million tonnes) industrial toxic waste dump. A fire, God forbid it occurs, would be very dangerous for the city's residents. Third, not far from Grozny, there is the Chernor-echenskoye reservoir, which is located thirty meters above the city's ground level. Should the dam burst (as a result of a terrorist act, for example) the consequences might prove to be worse than those of the entire war.

"Besides, several dozen kilometers from the capital, there are, on the territory of Chechnya, a radioactive waste dump and several burial grounds for livestock affected by malignant anthrax. These very dangerous facilities cannot be touched for more than one hundred years.

"We have explained our ideas in detail to the FCS, and they have taken them into account in order to the minimize chances of terrorist acts."

Official Discusses Preventing Environmental Accident

*LD1701192695 Moscow ITAR-TASS in English
1436 GMT 17 Jan 95*

[By ITAR-TASS correspondent]

[FBIS Transcribed Text] Moscow January 17 (TASS)—A meeting of Deputy Russian Minister for Emergency Situations Yuri Vorobyev and General Secretary of the Komsomolets International Fund Rio Praaning was held here today to discuss bilateral cooperation in preventing an ecological catastrophe in the Norwegian Sea where the Russian Komsomolets nuclear-powered sub sank in 1989.

Praaning passed over a 325,000 guilder cheque (about 10,000 U.S. dollars) on behalf of the Dutch Government to finance new projects related to the Komsomolets nuclear-powered submarine.

Environmental Damage in Chechnya Discussed

*LD1501223095 Moscow Ostankino Television First
Channel Network in Russian 1900 GMT 15 Jan 95*

[From the "Sunday" program]

[FBIS Translated Excerpt] Yet another victim has found itself under fire from the military in the 20th century—nature. [passage omitted]

Pakrac, a small town in Croatia, is currently being cleared of mines by the Blue Helmets, but every now and then explosions still resound. The land in the town is literally spiked with mines. According to witnesses, exactly the same situation applies in the suburbs of Grozny. The yield from the minefields will have to be harvested for the next decade. According to Russian Government press service information, the fighters used radio-operated mines along the Russian forces' route to Grozny; when the mines were activated, canisters of chlorine buried in the ground exploded simultaneously. Furthermore, sulfuric acid was poured on some sections of the roads.

Aleksey Yablokov, the president's advisor on ecological safety, is of the view that the greatest danger of a shell falling in the petroleum refinery compound is that the ground around the complex, which is saturated with oil to a depth of several meters, could catch fire.

An independent group of ecologists plans to set out for Chechnya after the hostilities have officially ended in order to carry out an expert ecological analysis. Most likely, however, it will be the Russian Army that will have to set about clearing up the aftermath of chemical contamination of the soil, fires at the petroleum refinery, and other ecological damage. The mercenaries fighting on the Chechen side are not paid to clean up after themselves, after all, but the Russian Army has for two years now had a document which has never before

been advertised anywhere, namely a Russian Federation Armed Forces concept of ecological safety, which says—I quote: The main principles of organizing ecological safety are the priority of preserving human life and health and the achieving of the objectives of the Russian Federation Armed Forces. Point 5 and Point 1: The assessment of ecological damage caused by the activities of the armed forces, the drawing up and implementation of measures to rehabilitate the environment, rehabilitation of the environment after conducting training exercises, special-purpose tasks, accidents, and catastrophes at military installations. [sentence as heard]

Three Years Left Before Plutonium Escapes From Komsomolets

LD1801110795

[FBIS Editorial Report] Moscow Ostankino Television First Channel Network in Russian at 1500 GMT on 17 January broadcasts a 30-minute unscheduled program entitled "The Site of Death - Open Sea."

The program opens with clips of the Soviet Navy on exercises and describes the fate of the Komsomolets nuclear submarine, which was reported on 7 April 1989 as having sunk after a fire in the Norwegian Sea. After two hours in icy-cold water, the 27 survivors of the original crew of 69 were picked up by the Aleksey Khlobystov, a fishing trawler. The disaster was preceded by various accidents involving other submarines, the program notes. The K-8 sub went on fire in April 1970; the K-56 sub had an accident in June 1973, the K-429 sub sank in June 1983, and the K-219 sank in October 1986 with ballistic missiles on board.

The crew of the K-127 sub was involved in a horrific accident caused by a malfunctioning nuclear reactor. Nine people lost their lives, others received enormous radiation doses. A survivor is shown, said to have received a radiation dose 1,000 times higher than the permissible norm. He has no legs and suffers from a skin condition. Sitting in a modest apartment, he says, his speech slurred, that he rescued everyone. Afraid to this very day to speak out, forgotten by the state, he is now dying a slow death, barely able to make ends meet, the program states.

Since Mikhail Gorbachev was in power and glasnost was gaining impetus at the time of the Komsomolets tragedy, the Defense Ministry was unable to hide behind a veil of silence and the crew did not share the fate of the forgotten victims of the K-127 sub. What happened became public knowledge.

A Russian Naval base Zapadnaya Litsa Fjord is shown, along with Northern Fleet's Typhoon class submarines, said to be state-of-the-art subs capable of destroying a territory the size of the United States. It was from here that the Komsomolets departed on 28 February 1989 for what turned out to be its last voyage. Two torpedoes with nuclear warheads, containing six kilograms of weapons-grade plutonium and a crew of 69 were on board. Clips show archive footage of the Komsomolets at sea and the film features interviews with named surviving crew members, who describe the fire spreading. Some of their colleagues perished in the fire and when an attempt was made to lift one

seaman off the upper deck, the latter was nearly skinned alive. Clips show what submariners should do in a similar situation to contain the fire.

Archive footage of Komsomolets under construction is shown and the commentary makes the point that a design or a construction fault caused the subsequent disaster. The titanium hull sub was designed at Leningrad's Rubin central naval design bureau and safety considerations were brushed aside to attain a diving depth twice as much as that of the U.S. subs.

Vice Admiral Yevgeniy Chernov, who commissioned the Komsomolets, says there was nothing wrong with the vessel. Following a further description of the tragedy on board the Komsomolets, the film shows naval assault troops being put through their paces during the Soviet era. Admiral Vladimir Chernavin, the then naval commander-in-chief, describes how the Northern Fleet was put on alert following the Komsomolets SOS, and he notes that its whereabouts were unknown. The commentary adds that there was no question of mounting a serious rescue operation, because the Soviet Navy was geared toward one goal alone—the annihilation of the enemy. "Reliable rescue services were practically non-existent. Nor do they exist now," the commentary states.

The commentary asks why this state-of-the-art submarine turned into an inferno. Dmitriy Romanov, deputy chief designer of the Komsomolets atomic submarine, says the reason was "the crudest contravention of the operating regulations on the part of the crew. Oxygen caused the fire. Further, it seems that the crew's survival procedures were non-existent. The crew was unprepared and was absolutely incapable of carrying out survival procedures for themselves or the submarine." The commentary adds: "Currently specialists have to acknowledge that fire protection on board the Komsomolets and, incidentally, where current submarines are concerned, remains at the 1960's level." The interior of a submarine is shown.

As clips show seamen being put through their paces in a tank full of water, the commentary states: "This is the Dzerzhinskiy Higher Naval Educational Establishment. Officer-engineers, turbine and nuclear specialists are trained here. It is enough to see the survival training to understand that it has nothing in common with reality. Fire-fighting techniques are practiced in an empty iron tank. How can it even begin to imitate the cramped premises of a submarine?"

Vladimir Stefanovskiy, former Northern Fleet chief mechanic, says that "hardly a single submarine was ready to sail if all the regulations were to be applied from the point of view of its technical condition, provision of spares and crew training."

The commentary says that the submarine was not quite ready to be commissioned, but, in the best traditions of the Soviet economy, it was a rushed job, being handed over for use at the end of 1983, so that promotions, awards, and privileges could be handed out. This led to the tragic death of 42 people and the contamination of the sea. Vice Admiral Yevgeniy Chernov says that "in time, serious ecological complications can be expected, linked to heightened radioactivity." Eventually, he says, radioactive fish could be eaten.

The commentary says that the Rubin design bureau wanted to have the sub raised, but Admiral Vladimir Chernavin warns that this would be tantamount to a "second Chernobyl, only worse." Clips show an underwater view of the sub, taken by the Mir bathyscape. The Rubin plans to have the sub raised and the underwater project is said to have cost Russia \$9 million. Specialists agree that in its present condition, the sub cannot be raised, the program notes. Igor Spasskiy, chief designer of the Rubin central naval design bureau says that his design bureau suggested to the government that the sub's forward section should be protected, to prevent plutonium escape, possible "according to our estimates, in two or three years."

The sub has now reached its maximum diving depth of 1,600 meters. The currents threaten the partly-protected nose cone, a job done by one of the previous expeditions, and only three years remain to avert a tragedy, the program concludes. It shows a mass in memory of the victims.

Greenpeace Criticizes Antarctic Base 'Dumping Ground'

MM2301115595 Moscow IZVESTIYA in Russian
19 Jan 95 p 8

[Unattributed report: "Bellingshausen Shames Russia"]

[FBIS Translated Text] "Russia's Bellingshausen Antarctic Base is an ecologically bad facility that shames Russia before the whole world"—this is the conclusion drawn by a Greenpeace commission after visiting the base during a 26-day expedition to monitor Antarctica's ecological state, POSTFACTUM was informed by the international organization's Soviet Greenpeace branch.

On the Russian base's territory the commission "discovered a multitude of instances of a barbaric attitude toward the environment," while in Greenpeace's opinion the base itself "looks more like a dumping ground or even a World War I battlefield than an Antarctic station."

In 1991 Russia signed the Madrid Protocol, which is the "ecological part" of the Antarctic Treaty and includes a "ban on the extraction of minerals for a period of at least 50 years as well as specially drafted stringent ecological norms."

However, despite the fact that Russia took a prominent part in preparing the Madrid Protocol, it has still not ratified it, "because the necessary documents, whose drafting was entrusted to Pavel Dzyubenko, deputy chief of the Russian Federation Foreign Ministry legal department, are still not ready."

Sweden To Help Scrap Russian Chemical Weapons

LD2101212295 Moscow ITAR-TASS in English
2055 GMT 21 Jan 95

[By ITAR-TASS correspondent Nikolay Vukolov]

[FBIS Transcribed Text] Stockholm January 21 TASS—Sweden has agreed to provide 2.6 million kronor to help Russia scrap its stockpiles of chemical weapons, the Swedish Foreign Ministry said in a press release on Saturday.

The funds will be used to destroy Russia's chemical arsenals in Kambarka, Udmurtia.

The press release said that Russia has the largest stockpiles of chemical weapons estimated at 40,000 tonnes. Under the convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction, they should be scrapped within 10-15 years after the convention came into force in 1993.

Swedish military experts will consult Russian specialists on the techniques used to destroy chemical weapons, and ensure the necessary level of safety and nature protection.

AZERBAIJAN

Caspian Sea Pollution, Other Problems Viewed

95WN0072A Baku GUNAY in Russian 11 Jan 95 p 3

[Interview with Professor A. Gasymov, author of the book "Caspian Lake Ecology," by Faik Zakiyev; place and date not given: "Caspian Tragedy"]

[FBIS Translated Text] The "Azerbaijan" Publishing House recently published the book "Ecology of the Caspian Lake" by Professor A. Gasymov, a well-known hydrobiologist, corresponding member of the Azerbaijan Academy of Sciences [AN], doctor of biological sciences. This book was put together by the Azerbaijan State Committee on Ecology jointly with the AN Institute of Zoology, where A. Gasymov has long been head of the hydrobiology laboratory and of the Caspian biological station.

This work is unique in a way because, as a world-renowned planktologist, Academician M.Ye. Vinogradov, writes in the foreword, the author for the first time "studied and summarized not only the impact of oil and petroleum products, reagents, pesticides, and other toxic substances on the Caspian fauna and flora, but also produced—again, for the first time—summarized, concrete, quantitative and qualitative characteristics of the phytoplankton, zooplankton, and zoobenthos of individual parts of the Caspian Sea, their correlation with depth, sea bottom, light, temperature, salinity, and oxygen, as well as the role of, for instance, mollusks in self-purification of the polluted Caspian water." So, after congratulating A. Gasymov on the publication of this in many respects remarkable monograph, we asked him to answer some questions on the subject of the fate of this unique inland water reservoir.

Zakiyev: Abdul Guseynovich, I have in my home library probably 10 of your books: "The Caspian Sea," "Caspian Sea Fauna," "Biology of the Modern Caspian Sea," "Protection of the Caspian Sea." In all those books the Caspian Sea is invariably called a sea. And on geographic maps it is also designated only as a sea. And now suddenly—"Ecology of the Caspian Lake." What is this—a tribute to the geographic truth? Or were there different reasons that prompted you to give your new book such an—at first glance—unusual name?

Gasymov: First and foremost this is, as you said, a tribute to geographic and historic truth. After all, this natural, completely enclosed water reservoir without outflow is not a sea—it is a true lake. It was named a sea for "embellishment" sake, because of the size of this lake—the largest reservoir in the world. But there also is another reason. As is known, in shoreline territorial waters a particular coastal

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state exercises border control, customs, and sanitary authority as on its national territory. Before the disintegration of the USSR, when the Caspian Sea was almost our inland reservoir, it was not very important whether it was a lake or a sea. Problems arose after the disintegration of the Union, when all of a sudden five independent states emerged on the Caspian Sea coast: Azerbaijan, Russia, Kazakhstan, Turkmenistan, and Iran, with protected national coastal waters.

It is one matter when we are dealing with a sea—such as the Mediterranean, Black, or Northern Sea: Here any state, in keeping with international treaties, may engage in navigation, fishing, and extract as much oil as it wants outside the 12-mile coastal zone. If a reservoir has the status of a lake, however, nobody has the right to enter even the 200-mile zone.

As expected, this problem has acquired particular significance lately in connection with the planned development, together with a number of foreign countries, of Caspian oil fields within the 200-mile zone. But I must tell you that this artificial problem smacks more of politics...

Zaklyev: Every time we speak of the Caspian Sea, flattering epithets pour out as if from a horn of plenty: It is the largest lake in the world; it turns out that it has unique fauna and uncouneted natural resources; and many other things. And at the same time you will probably be hard pressed to find in our land another reservoir so polluted by man.

Gasymov: The Caspian basin is mostly polluted by hydrocarbons, first of all oil and petroleum products—stable and highly toxic compounds. After they get into the lake, they undergo various changes under the impact of physical-chemical and biological factors. The chronic pollution of the Caspian—not only by oil but also waste water containing phenol, kerosene, boiler oil, and diesel fuel (it is hard to imagine what is not being dumped into the Caspian these days)—has already resulted in a sharp decline of the sea's biological productivity and the spread of carcinogenic diseases among sturgeon and small commercial fish as well as sea-bottom organisms the fish feed on—worms, mollusks, and crustaceans.

In addition, the oil film that frequently forms after accidents over huge areas of the surface keeps light and oxygen from penetrating the sea water, which in turn interferes with algae photosynthesis.

Or take for instance so-called "thermal pollution." Our researchers demonstrated that it has a very negative effect on many crustaceans. Fish with various pathological deviations are no longer a rarity in the Caspian. The continuing intensive pollution of the Caspian environment has already resulted in very dangerous fish mutations. Also, the accumulation of petroleum products in the Caspian fauna has already negatively affected its fertility, in that some varieties of fish are producing nonviable, disfigured progeny. For instance, we registered a sharp decline in fertility and high mortality of a considerable proportion of the progeny of sturgeon and small commercial fish in the Kura River and Minor Kyzylagan Bay.

The dangerous situation that emerged under the impact of oil pollution of the Caspian has already resulted in a

dramatic change in the heat and gas exchange between the lake and the atmosphere, a sharp decline in biological resources, and a degradation of certain biocoenosis. According to specialists' estimates, unless we take protective measures, within the next 10 years we could lose forever the fishing value of the Caspian Sea's Azerbaijan shelf over a territory of about 50,000 square kilometers.

Zaklyev: Three years ago an international conference on the problems of the Caspian Sea, organized by the republic State Committee on Ecology and the Azerbaijan Academy of Sciences, was held in Baku. As I recall, it produced a score of official documents to be signed by environmental protection organizations of Caspian Sea republics, which envisaged cooperation of efforts in resolving the sea's problems. In this connection I would like to ask: Has anything changed over these three years in the fate of the Caspian Sea?

Gasymov: Alas, so far there is no change for the better. Rather the opposite... The point is that many—undoubtedly valuable—projects put forward by conference participants remained on paper. First of all I mean, of course, the Higher Caspian Council—the intergovernment center for coordination of scientific and technical work conducted in the Caspian region—which never materialized: The previous leadership of the republic, alas, subsequently did not support the initiative of scientists and ecologists.

The conference organizers, led by Arif Mansurov, head of the State Committee on Ecology, did achieve a very important, in my opinion, point—the world community's attention was drawn to the problem of the Caspian ecological disaster; the process of consolidating the scientific and technical potential of the Caspian region's independent states has begun.

Zaklyev: As is known, in September of last year a contract was signed between the State Oil Company of Azerbaijan and a consortium of Western countries on joint development of deep-sea oil fields in the Azerbaijani sector of the Caspian Sea. Well, for our independent state, which is currently going through economic and social difficulties, the development and production of oil and gas in its new regions is a vitally important process. But here is what concerns a lot of people: Because of our eternal strategic shortsightedness, might we not create a new source of pollution for the Caspian Sea?...

Gasymov: You see, I happened to participate in the discussion of drafts of this contract. In particular, I studied in detail the "ecological part" proposed by the British Petroleum and Amoco companies. I think that all your concerns are unfounded, because the fields will be developed using state-of-the-art drilling technology which precludes any leak of petroleum products into the sea. This includes pipelines of high working quality that do not crack even at considerable depths or under high atmospheric pressure; various nontoxic reagents successfully tested in the aquatic area of the Northern Sea; and many other things.

But again, these guarantees are, you may say, only on paper. How will they behave in the conditions of the Caspian, which has more stormy days a year than all other seas taken together, including the Northern Sea? This will require, of course, constant monitoring on our part. We have already conducted along the lines of biomonitoring a thorough

biological study of the areas of future development of new oil fields—[name illegible], Gonyashli, Chirag, and Inam. And in the process of oil field development we will again conduct biomonitoring and compare old and new quantitative and qualitative characteristics of the phytoplankton, zooplankton, and zoobenthos. Then we will know for certain whether the water in the Caspian areas under development is being polluted or not.

Zaklyev: And on top of everything this trouble—the current swift rise in the level of the Caspian, which has already claimed tens of thousands hectares of land in various regions of the republic. If it continues this way, we may become in time a new Atlantis for future generations. Was it not possible to forecast the current natural cataclysm?

Gasymov: You see, we miscalculated in our forecasts. Both our domestic and foreign scientists-hydrologists assumed that the "scheduled" decline in the sea level, which began in 1929, would continue at least until the year 2000. This forecast was erroneous: In 1977 the level began to rise and over the next 17 years rose by 2.2 meters. According to a new forecast, by the year 2020 it will rise to 7 meters above the 1976 level, and 5 meters above its current one, which will be above the highest mark over the past nine centuries.

Zaklyev: The rise in the level of the Caspian, which has brought a lot of problems to the state and to residents of Lyankyaran, Astara, Naftchala, Khachnaz, and Sumgayyt, could not fail, on the other hand, to improve the condition of its water...

Gasymov: To a certain extent this is true. The rising level has indeed improved the condition of the water—in particular, in Great Kyzylagach Bay; it had a positive effect on the development of fishing in this bay. In addition, the biomass of fodder organisms increased in the zones of our pollution-free coast. The same circumstances also positively affected navigation.

All of this notwithstanding, there has also been considerable damage to many of our ship-repair plants, the Salyanefit and Azizbekovheft oil and gas production companies, the Imeni Amirova Azerbaijani Railroad, the highway production association, and fish-breeding enterprises of the Azerbaijani state concern. Economists estimate that reconstruction work resulting from the rising level of the Caspian Sea alone will cost R11.62 million in 1991 prices.

In Lyankyaran Rayon, some streets in Narimanabad-I and Narimanabad-II, the Ust-Kurinsk sturgeon plant, and part of Port-Ilich city are already under water, and in Astarinskiy Rayon—extremely fertile lands of local kolkhozes and sovkhoses, as well as waterfront residential buildings...

Zaklyev: So how do we fight the Caspian? And can we?

Gasymov: Why should we? We need to help it "survive," tide over difficult times, and pollute it less. As to the sea making mischief in its "zeal," we need to fortify the shoreline in advance, redesign piers and ship-lifting structures, build dams and breakwaters, and in cities—shore-protection structures. These and other hydrotechnical measures will probably cost millions of dollars, which the state does not have.

In order to prevent a sharp, uneven rise in the Caspian Sea level we will probably have to increase the drainage of water into Kara-Bogaz-Gol Bay to 35 cubic meters [as published] a year. In addition, we need to already begin to dump excess Caspian water into the dried-up Komsomolets Bay in the northern part of the Caspian... And still, by the year of 2020 another 5,000-6,000 square kilometers of arable land will end up under water on the Azerbaijani coast alone, as well as some parts of Baku, Lyankyaran, Astara, Naftchala, and Khachnaz. These are specialists' forecasts...

Zaklyev: Let us hope to God they will not materialize.

ESTONIA

Purifying of Liquid Radioactive Waste Begins in Paldiski

LD2201223895 Moscow Russian Television Network in Russian 2000 GMT 22 Jan 95

[From the "Vesti" newscast]

[FBIS Translated Text] Purification of liquid radioactive waste has commenced in the Estonian town of Paldiski, where the Russian nuclear center for training submariner officers had been situated. In the underground stores of the former base, 450 tonnes of radioactive dirt has accumulated. According to a mutual agreement between Estonia and Russia, the facility must be dismantled by 30 September 1995. Russian servicemen, dressed as a precautionary measure in civilian clothes, are staying in Paldiski legally.

The most dangerous stage of the job—the removal of the radioactive rods—the Russian servicemen carried out on their own and on time. A Finnish unit was brought to Paldiski for the treatment of the radioactive water. The Finnish Government, by way of aid, has agreed to finance the treatment to the tune of 100,000 U.S. dollars. The work must be finished in four months time, when all the purified water will be released into the Baltic Sea and the filters that were used will be buried. The former base has its own Russian station for purification, which is four times more powerful than the Finnish one.

[Begin Rear Admiral A. Olkhovikov recording]

Olkhovikov: We have the technologies. This station is an old one, but it works. The same methods that are used in the Finnish unit are technologically possible there. [end recording]

The servicemen give two reasons for the Russian station not being used. The official one is the meager military budget. They speak between themselves of an advertising campaign to push forward the Finnish technology in order to get a large order for the Far East.

KAZAKHSTAN

Atyrau Oblast Termed Ecological Disaster Area

95WN0071A Almaty EKSPRESS-K in Russian 5 Jan 95 p 5

[Abridged rendition of the memorandum to the Republic of Kazakhstan parliament written by Yu. Vikulov, chief of the Atyrau Oblast environmental agency; T. Chaklikov, health

care department chief; and A. Kenzhagaliyev, chief of the Kazakhstan Meteorological Agency's West-Kazakhstan center: "The 'Second Kuwait' So Far Is a Disaster Zone"]

[FBIS Translated Text] Atyran authorities propose to declare the oblast an ecological disaster zone. The decision must be made by the Supreme Council. It is not an easy decision—if it is declared a disaster zone, additional state subsidies are needed for environmental protection measures and social allowances. At the same time, some rayons are indeed in a catastrophic situation. Yu. Vikulov, chief of the Atyran Oblast environmental agency; T. Chaklikov, health care department chief; and A. Kenzhagaliyev, chief of the Kazakhstan Meteorological Agency's West-Kazakhstan center, presented their arguments in a memorandum sent to the parliament. We are publishing excerpts from this document.

Over a long period of time economic development in Prikaspiyskiy Rayon was carried out on the basis of extensive use of natural resources, without taking into account future ecological and social consequences of economic decisions made.

Sectoral agencies did not deal with questions of ecological safety in the development and exploitation of oil and gas fields in the areas adjacent to the Caspian Sea and in the construction and exploitation of large industrial facilities for processing of raw hydrocarbons.

As a result, an extremely tenuous ecological and sanitary-epidemiologic situation has developed in the region. The anthropogenic effect on the environment is exacerbated by natural factors. The Caspian region's geographic position in itself makes it a geochemical trap for toxic waste circulating in the basin.

One of the latest factors is the intensive rise in the Caspian Sea level, which over the past 15 years rose by more than 2 meters.

As a result, the geocological situation in the Caspian region worsened dramatically. This results in considerable damage to the national economy and has already put the region on the verge of ecological disaster.

Thousands of hectares of land, hay fields, animal husbandry farms, and farm structures already are underwater.

Observations show that if the sea level continues to rise, the flooded area will increase significantly, as a result of which population centers and economic entities, highways and oil fields will end up in the zone of flooding and wave-caused erosion.

Of particular danger to the northern, natural preserve part of the Caspian Sea in connection with its sharp rise is exploitation of the Martyshi, Karsak, Prorva, and [word illegible] oil fields. Practically all oil fields are in the water, because of sea water filtering through the body of existing dams.

A number of oil fields already are completely flooded: East Kokarna, Tadzighali, Pribrezhnoye, Pustynnoye, and others. Capping wells in the open sea may result in oil and gas showings because of the decay of technical and exploitation systems affected by sea water.

Oil pipelines and power transmission lines have been flooded and subjected to impact of sea waves. In a number of places, pipelines already have been washed out; electrochemical protection is not working. No concrete measures or design solutions on moving and protecting pipelines have been drafted.

Because of this, accidents can happen during ice movement and storm winds. There are no stand-by technical means and measures to deal with the consequences of accidents. We have checked the condition of all aforementioned objects more than once and have submitted the necessary proposals.

The work currently being done in the area of protecting oil fields from flooding represents essentially temporary measures against the sea-driven phenomena but not from the rise in its level. Construction of capital dams designed to protect from further rise in the sea level will require colossal expenditures that are perhaps incommensurate with the benefits that will be derived.

In these circumstances, the following tasks need to be dealt with.

1. Ensuring ecologically safe and economically expedient development of oil fields and installation of new technologies for their utilization.
2. Ensuring reliable capping or liquidation of oil fields, especially old ones, whose protection from the threat of flooding is not economically justified.
3. Moving the objects of production infrastructure and external accommodations from the flood zone.

The region does not have sufficient science and technology potential and material resources to deal with the set of such complex problems.

Another important line of work is evaluation and liquidation of the consequences of operating military test sites, which used to occupy more than 15 percent of oblast's territory.

Most of this land was occupied by three test sites whose centers were located on the territory of Astrakhan Oblast, which to a certain extent made information collection and liquidation of consequences more difficult.

Geobotanical, hydrological, geochemical, and radiation study of the landscape, combined with the medical and sociological observation of the population, was conducted on the territory of test sites and areas adjacent to them.

Test site territories, as well as other land occupied by military agencies in Isatayskiy and Inderskiy Rayons, are littered with military equipment debris.

There are more than 300 separated rocket stages with remaining fuel in Taysoygan Sands alone. Contamination of this territory of 11,000 hectares with dimethylhydrazine (rocket fuel heptyl) and nitrosodiethylamin exceeds the PDK [maximum allowable concentration] by a factor of 10-15.

It has been verified that they migrate from the soil into plants and even the animals feeding on these plants, which presents a threat for the population's health.

In both areas, concentration of thallium, lead, strontium, cadmium, bromine, nitrates, chlorides, and sulfates in excess of the PDK was detected during hydrochemical testing of water points used for economic and household purposes. For instance, of the more than 60 wells examined on a Baldukiy farm, practically none met the requirements; moreover, using water from most of these wells has become dangerous.

Medical observation of Azgir zone residents showed that their state of health, especially that of children, is worse than average for the oblast (the incidence of disease and the mortality rate exceeding the average by a factor of two to 3.5). And the oblast level is worse than the republic average by a factor of two to three. Especially high is the incidence of cancer, as well as bone marrow and blood ailments (95 percent of children suffer from anemia).

By many indicators, the state of health of residents of Azgir and Balkuduk settlements is much worse than the corresponding indices among the population of the Chernobyl disaster zone.

Comparative analysis shows that with respect to 22 varieties of the most important diseases, the situation in Kyzylginskiy Rayon is much worse than in the industrial Embinskiy Rayon, where the discharge of toxic substance into the environment is 1,000 times higher than in Kyzylkoga.

As is known, military test site operation was suspended by the Soviet of People's Deputies exactly three years ago and was completely halted by a joint decision of the head of oblast administration and the minister of defense of the Republic of Kazakhstan. However, on 22 January 1993 an intergovernment agreement was signed between Russia and Kazakhstan on restarting operations on aviation and rocket test sites on the territory of Kyzylginskiy Rayon in our oblast.

At the same time, a comprehensive study of these test sites and evaluation of the consequences is still not completed; the question of compensation for damages has not been resolved; and recultivation of the territory is not being done.

Despite numerous requests of the oblast and the republic, materials of the Taysoygan test site study by Russia's Main Rocket Forces Directorate have not been handed over.

Of serious concern is the radiation situation.

This is linked first and foremost with the Azgir zone, where the Institute for Experimental Physics (Arzamas-16) over the period from 22 April 1966 to 10 November 1979 conducted 17 nuclear explosions. The summary discharge of radioactive elements was close to 10 million curies (the same as in Chernobyl). Residual radioactivity is extremely high in nine cavities, with an aggregate volume of 1.2 million cubic meters, formed at the depth between 160 and 1,500 meters.

It has been established that five of the nine artificially formed cavities are not hermetically sealed, as scientists had assumed, and are filled with underground water. At one of allegedly already recultivated sites, radionuclides of strontium, cesium, and plutonium are leaking into the environment; radionuclide penetration of the food chain had been detected, which may lead to their making their way into the

local population's food. The possibility of radioactive contamination of underground waters at other sites cannot be precluded.

Soil gamma-activity detected at some areas of the test site represents potential danger for ground water.

There is no question that radioactive isotopes have gotten into the ground water with infiltrating precipitation, and it is only a matter of time before they make their way to nearby wells.

It should be mentioned that the condition of Azgir's eastern and western domes after the explosions conducted here has not been properly studied; the dynamics and mechanism of domes' growth are unknown. Changes in the domes may be affected by earthquakes, since the region is seismologically active; neither can we rule out earthquakes caused by man-made (Astrakhan gas condensate oil field is being developed nearby) or transient factors. All of this may lead to formation of additional cracks and collapse of cavities with unpredictable consequences. Therefore, it is necessary to consider the question of moving Azgir settlement into a safer zone.

A poor-quality environment affects the state of the Caspian region fauna and human health. Research conducted by the fish-breeding institute proves that under the impact of chronic pollution, marketable fish show organic deviations. For instance, sturgeons manifest exfoliation of muscle tissue, weakening of the roe membrane and gamete formation, and fatty degeneration of the liver. There is a real danger of losing breeding shoals, which in the near future may result in the extinction of the sturgeon as biological species.

Since 1976 a fish disease was identified, diagnosed as dermafibrosarcoma, which is a tumorous growth. Currently, fish (sturgeon, pike-perch, carp-bream, Caspian roach, common carp, catfish) with tumorous growths mainly in the head and fin areas and ulcers on the belly part of the body are found in fishermen's hauls, at procurement facilities, and fish processing combines' refrigerating chambers.

In 1992, about 10 percent of commercially harvested pike-perch were affected with this disease. We should keep in mind that we are talking about fish with pronounced symptoms of the disease, visible to the naked eye, and of commercial size. What part of the entire fish population is affected is hard to judge, since there is not a single specialized ichthyopathology service, and veterinary services' inspection are sporadic and cover only the commercial fishing period.

Environmental pollution has also affected the condition of waterfowl. Since 1981, massive loss of birds has been observed every year on the sea shore east of the Ural River's mouth. Bird carcasses have been found to the east of the lower part of the Ural River to Komsomolets Bay, that is, over a stretch of 300-350 km.

In May 1988, western winds alone drove ashore along the aforementioned line about 250,000-300,000 birds of 27 varieties; taking into account those carried into the sea and caught in reed banks, their number is close to a million. Predominant among them were salt- and freshwater ducks, coots, sandpipers, and seagulls.

The Epidemiology and Virology Institute identified toxic substance poisoning as the cause of mortality.

The vulnerability of the Caspian Sea as an ecosystem has led to its degradation, and its condition is appraised as pre-critical, which may be exacerbated by a large-scale invasion into the environment in connection with the planned development of the shallow northeastern part for oil production.

Keeping in mind the extremely unfavorable combination of natural and anthropogenic factors—the catastrophic rise of the Caspian Sea level; pollution of its basin with toxic waste; a sharp decline in the stocks of commercially valuable varieties of fish, especially sturgeon; the continuing loss of animals and birds; the consequences of military test sites' operations; the oil and gas complex's unrelenting impact on the environment; and the deterioration of the population's health—we request that Atyrau Oblast be declared an ecological disaster zone.

LATVIA

Environmental Protection Memorandum Signed With Finland

WS1101155995 Tallinn BNS in English
1403 GMT 11 Jan 95

[FBIS Transcribed Text] Riga, Jan 11, BNS—The Finnish Government will extend 1.1 million lats to reconstruct the water supply and sewerage system of the Latvian Liepaja city, according to a cooperative memorandum on environmental protection, which was signed Wednesday in Riga.

Latvian Environmental Protection Minister Indulis Emsis described cooperation with Finland as very successful "because Finland understands us better than any other developed country thanks to its similar geopolitical situation."

"This is one more step in tackling Latvia's environmental problems. The process has developed from technical assistance and education programs into major investment projects," Emsis said.

The minister thanked the Finnish Government and Ambassador Anti Lassila, who was present at the signature of the memorandum, for supporting Latvian activities.

The Finnish Government subsidies constitute only part of the 11-million-lat reconstruction project whose implementation will begin this spring and continue until the end of 1999.

LITHUANIA

Environmental Protection Agreement Drafted With Belarus

WS1201102495 Tallinn BNS in English
1640 GMT 11 Jan 95

[FBIS Transcribed Text] Vilnius, Jan 11, BNS—Lithuanian and Belarusian environmental protection ministers met Tuesday in Vilnius to prepare a bilateral cooperation agreement.

The accord should be signed in mid-February, Lithuanian Environmental Protection Minister Bronius Bradauskas and his Belarusian counterpart Mikhail Rusy said after the meeting.

The agreement covers cooperation in the preparation and implementation of various environmental projects and programs, the exchange of experts and information, organization of joint consultations and meetings.

Rusy and Bradauskas said they also discussed specific issues such as transportation of dangerous cargos, protection of the river Nemunas and cleaning of former army bases.

The ministers said their views coincide on the problem of dangerous cargos transported through Lithuania and Belarus. They said there have been attempts in both countries to transport materials that seriously threatened the environment. The sides agreed that the exchange of information must become more efficient in order to prevent such incidents.

Bradauskas pointed out that preventive measures are more valuable in the field of environmental protection than measures taken after an environmental accident.

Agreement on Environmental Protection Prepared With Belarus

LD1001200395 Vilnius Radio Vilnius Network
in Lithuanian 1700 GMT 10 Jan 95

[FBIS Translated Text] The Lithuanian and Belorussian [Belarusian] ministers of environment protection, having met in Vilnius today, prepared a draft agreement of cooperation between their ministries. They announced this at a news conference.

According to the ministers, the agreement is to be signed at the beginning of February.

The sides intend to cooperate in the drafting and implementation of joint programs and projects, in organizing consultations and discussions. The main spheres of cooperation will be: the protection of natural resources and of the environment, their legal and economic aspects, monitoring and ecological education.

Mikhail Rusy, Belorussian minister of natural resources and environmental protection, and Bronius Bradauskas, Lithuanian minister of environment protection, said at the news conference that they discussed other concrete issues, too, such as the transport of hazardous materials, the protection of the Nemunas basin, the improvement of radio-ecological monitoring, and of the exchange of effective information, the inspection and management of former military territories.

Replying to questions by journalists, the Lithuanian and Belorussian ministers of environment protection said their views on the transport of hazardous materials were very completely identical. The ministers stated that both states had sufficient evidence about attempts being made to transport material harmful to the environment to or through their states. An effective exchange of information was essential in this sphere.

Minister Bradauskas stressed that preventive efforts in the protection of the environment were more valuable than the elimination of the consequences.

UKRAINE

Reorganization of Ministries Viewed
WS0601094595 Kiev VSEUKRAINSKIYE
VEDOMOSTI in Russian 28 Dec 94 p 6

[Report by Ihor Osipchuk: "The Administrative Octopus or Skilled Helmsman; or What Is the Future of the Newly Formed Ministry of Environmental Protection and Nuclear Safety"—first paragraph is VSEUKRAINSKIYE VEDOMOSTI introduction]

[FBIS Translated Text] Is a presidential edict from 15 December—abolishing the Environmental Protection Ministry and the State Committee for Nuclear Control [Gosatomnadzor] and establishing a new department in their place—a serious mistake or a progressive innovation? The opinions of former Environmental Protection Minister Yuriy Kostenko and former Gosatomnadzor Chairman Nikolay Shteynberg are completely opposite.

Yuriy Kostenko, who served in this post over two years, actively supported the unification of the above-mentioned ministries.

"When L. Kuchma was prime minister, I stated that such a reorganization was a condition for my occupying a minister's chair," Yuriy Kostenko told VSEUKRAINSKIYE VEDOMOSTI. Leonid Kuchma agreed with my proposal. The idea, however, was not understood by the Presidential Administration. I also discussed this issue twice with Nikolay Shteynberg. His position is that Gosatomnadzor should deal directly with nuclear power plants [AES] and be independent. The Environmental Protection Ministry, in turn, should handle radioactive contamination outside AES. I also favor specialized organizations. They should be autonomous, but combined in a unified structure to make it possible to concentrate political power—pertaining to all environmental protection issues—in the hands of one individual, a minister. He will be responsible for everything. A basis for adopting more qualified decisions will be established. In addition, due to the extension of power, we will suspend our practice of fighting against consequences, which casts aside the fight against reasons leading to environmental disasters. This is the sense of reform. The same course was taken by Germany immediately after the Chernobyl disaster; such a course was adopted by France some time before.

"The German and French ministries, along the lines of which our ministry was established by a presidential edict, fulfill political functions," said Nikolay Shteynberg. "These states, however, have independent engineering bodies of control. As for Ukrainian ministries, they are not political, but economic bodies. It is inadmissible to subordinate Gosatomnadzor to one of them. Please, pay attention to the fact that people with common sense in Ukraine will be bewildered, if an environmental minister is nominated to the post of a construction minister. A similar staff reshuffle was conducted in Germany not long ago and it was taken for granted. It is interesting that both German and French environmental ministers—the old and new—are politicians."

By the way, Mr. Kostenko also regards himself as a politician. "A minister's post in a law-governed state is a political

job. I agreed to occupy the post when I dealt with politics." He also explained that the establishment of a new ministry is part of the reorganization of the entire structure of executive power. The primary drawback of the existing executive power is that it duplicates several functions, while it holds no responsibility for other ones.

One, however, can be perplexed by the fact that "probes" with reforms—with unavoidable mistakes at the beginning of the process—were initiated at the ministry providing nuclear security.

A Week of Nuclear Irresponsibility

Nikolay Shteynberg assumes that—since an edict comes into force from the instant it is signed, the Environmental Ministry and Gosatomnadzor do not legally exist. The government was obliged to specify how their functions would be fulfilled within a transition period.

"Nuclear security cannot be disrupted," complains Nikolay Aleksandrovych. "I am not aware of my current powers. Therefore, I consider that I have no right to sign any documents. For example, I was asked to sanction the entry of a trainload of uranium for our AES.... Anyway, we are continuing to work, at least as much as the current situation allows it."

"I did not even question whether I should continue to fulfill my old functions until I receive further instructions," said categorically Yu. Kostenko. "This is a rule. (Yuriy Ivanovych, however, failed to specify the law covering this issue.—editor's note) Bureaucratic bodies, however, work in such a manner that we receive government resolutions several days after they adopted. A primary drawback of the edict is that a new minister—who must promptly begin to draft a concept of a new ministry—has not been nominated. He will have to take care of reducing any potential negative consequences to a minimum."

Completely?...

Gosatomnadzor fulfills a variety of very difficult and responsible functions. Could a new ministry take them upon itself?

"Gosatomnadzor should enter a new ministry's structure as painfully as possible," continues Kostenko.

"I do not doubt that half of my staff goes on vacation these days and returns to their jobs later," emphasized Shteynberg. "Judging by current moods, such a course of developments is quite possible."

As is known, "G-7" states support a strengthening of the independence of bodies exercising control over nuclear safety. Yu. Kostenko in essence assumes that Gosatomnadzor will achieve greater independence—than before—being part of a [new] ministry.

They Did Not Ask Advice of a Person Involved

N. Shteynberg is extremely angered by the fact that no one asked his advice when an edict was drafted. "The system of authoritarian power is in use. Pay attention to the fact that the Power and Electrification Ministry, the State Committee for Nuclear Power Engineering, and the National Academy of Sciences oppose reorganization."

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Will N. Shteynberg agree to occupy a position in a new ministry? "I have no faith in this state system," he stated with certainty.

Yu. Kostenko believes that his nomination to a ministerial post is improbable. He, however, will not refuse such a proposal if it is received. "I wish to complete initiated transformations, the essence of which is to establish an efficient system ensuring the rational use of natural resources and environmental safety. Later.... You know, I do not want to resign as environmental minister."

The Supreme Council Commission for Issues of Nuclear Policy and Nuclear Safety sent a letter to the Presidential Administration, in which it expresses its disagreement with the decision to unite the Environmental Protection Ministry and Gosatomnadzor. It is stated that when any structure is undergoing reorganization, no less than a year is required to achieve efficient performance. This argument is in accord with Shteynberg's idea regarding the inadmissibility of disruptions in controlling nuclear safety. In addition, proceeding from the experience of formerly independent inspection offices, which were part of the Environmental Protection Ministry, it is assumed that when a new ministry is established, control over nuclear safety will deteriorate.

When the article was ready for publishing, we received a report that the Cabinet of Ministers had issued a regulation instructing the Environmental Protection Ministry and Gosatomnadzor to continue to fulfill their duties until organizational issues are resolved.

UNESCO-Chernobyl Program Meeting Ends in Paris

LD1401171895 Moscow ITAR-TASS in English
1634 GMT 14 Jan 95

[By ITAR-TASS correspondent Andrey Krasnoshchekov]

[FBIS Transcribed Text] Paris January 14 TASS—The 5th session of the ruling committee of the UNESCO-Chernobyl program finished today at the UNESCO Paris headquarters after discussing the elimination of aftermath of the Chernobyl accident and preparations for the 10th anniversary of the tragedy. The committee includes representatives of Russia, Ukraine and Byelarusia [Belarus].

Head of the Russian delegation and First deputy Minister for Emergency Situations Vasilii Voznyak told ITAR-TASS that the three republics have managed to finance the UNESCO-Chernobyl program despite the lack of money. Their projects have resulted in creation of centers of social-psychological rehabilitation of accident victims. They are also planning to form a zone of social-economic development to house about 30,000 people from Chernobyl-stricken areas.

Bearing in mind the upcoming 10th anniversary of the Chernobyl accident, the Russian delegation suggested that UNESCO coordinate the U.N.-sponsored international arrangements being an organization "which is efficient and experienced in assistance to the elimination of accident aftermath."

Decree on Environment, Nuclear Security Ministry WS1101102995 Kiev VYBIR in English 1300 GMT 10 Jan 95

[Decree by the President of Ukraine Leonid Kuchma "On Establishing the Ministry of Natural Environment Protection and Nuclear Security of Ukraine;" from "Ukraine in Documents"]

[FBIS Transcribed Text] For the purpose of further improvement of the system of the natural environment protection, and safety of utilization of the nuclear power and radiation-related technologies and substances, I hereby resolve:

1. To establish the Ministry of Natural Environment Protection and Nuclear Security of Ukraine, on the basis of the Ministry of the Natural Environment Protection of Ukraine, and the State Committee of Ukraine for Nuclear and Radiation Safety, which are liquidated.
2. The Cabinet of Ministers of Ukraine is to:
within the two-months term, prepare a Draft Provisions on the Ministry of Natural Environment Protection and Nuclear Security of Ukraine;
take the necessary measures in connection with liquidation of the Ministry of the Natural Environment Protection, and the State Committee of Ukraine for Nuclear and Radiation Safety;
make the decisions by the government consistent with the present Decree, as well as submit the respective proposals as to introductions of alterations into the legislative acts which proceed from the present Decree.
3. The present Decree becomes effective on the day of its signature.

President of Ukraine Leonid Kuchma
Kiev, December 15, 1994 No. 768/94

Firm Proposes 'Ecologically Friendly' Chernobyl Replacement

AU1001195795 Kiev HOLOS UKRAYINY in Ukrainian
5 Jan 95 p 3

[Report by Serhiy Yasen: "In Order To Close Down the Chernobyl AES, a Replacement for It Must Be Found. 'Enerhiya' Proposes a Variant"]

[FBIS Translated Text] Sooner or later, the Chernobyl AES [atomic power plant] will be closed down. This will not happen as soon as prosperous Western Europe would like, but we ourselves should not shift the tasks of disabling the Chernobyl AES and looking for alternative sources of energy onto our children's shoulders.

Proceeding from this, the financial and industrial group "Kontsern Enerhiya" [Energy Concern] has proposed a realistic program which provides for building, over six or seven years, a modern powerful and ecologically friendly electric power plant, which would constitute a precondition for closing down the Chernobyl AES. The necessary scientific and engineering substantiations for this are available. Nor should we look for a suitable construction site—the

area of the unfinished construction of the Chyhyryn AES may be used for the purpose. Here, on the right bank of the Dnieper, on a territory of 1,000 hectares, the river transport facilities, the boiler house, the settlement with 110,000 square meters of housing, storage premises, a house building combine, and communications stand as a bleak monument to the lack of foresight and to wastefulness. All of this was built in anticipation of commissioning a future Chyhyryn AES, but is now being used in a haphazard manner or is simply pilfered or allowed to decay.

It is proposed to resume construction in Chyhyryn with the participation of joint-stock capital and credits from a consortium of Western banks, but for different objectives and on different principles.

"Enerhiya," founded by almost two dozen enterprises, firms, and organizations of Ukraine, Russia, and the United States, does not seek budget funds or advantageous state orders. Private capital, although not yet large enough, may already be used as a motive force in programs for restructuring Ukraine's economy and implementing market reforms.

Construction of a modern steam-gas electric power plant in Chyhyryn will constitute only the first stage in the activity of the transcontinental "Kontsern Enerhiya." Its shareholders, investors in the power-engineering building in Ukraine, will be able to take part in the activity of the concern's own commercial bank, a pension fund, and, certainly, get considerable dividends. This is because those enterprises which are founders of "Enerhiya" possess technologies for the production of specially pure quartz, household electric appliances, filters for purifying drinking water, agricultural technology, and so on. This potential is not yet being used, but a speeding up of privatization will definitely free our economy from the chains of state management and monopolism and will make it attractive to foreign investors.

Even now, "Enerhiya" has agreements on Western credits amounting to 3.5 billion German marks for 10 years. Provided, of course, that this capital will be at the disposal of a commercial structure with joint-stock ownership, in which the state will only participate as one of the shareholders.

Within the transnational financial and industrial group, Ukraine will hold a control package of shares and will also enlist foreign capital for mutually advantageous cooperation. It is also planned to distribute the "Enerhiya" shares outside our state, in countries where the implementation of the project under the motto "Chyhyryn as an Alternative to Chernobyl" will promote the shaping of Ukraine's image as a responsible member of the international community. Whether we want it or not, Ukraine's reputation in the world is mainly shaped under the influence of two factors—nuclear weapons and the Chernobyl AES. We are already getting rid of the former and, in doing so, are sustaining considerable material and financial losses. As regards the Chernobyl AES, we still have a choice: Either to delay its shutdown, squeezing out its last kilowatts and thereby scaring our neighbors on the continent, or to create new capacities which will become a precondition for closing down the Chernobyl AES.

Ecological Experts Approve Odessa Oil Terminal Construction

WS1301104695 Lvov INFOBANK in English
0800 GMT 13 Jan 95

[Unattributed article from the "News Service" feature]

[FBIS Transcribed Text] Kiev—The Ukrainian parliament is scheduled to discuss the construction of an oil terminal in Odessa on 19 January, according to Oleksandr Matviychuk, a member of the parliamentary committee on transport and communication. Mr. Matviychuk also stated that the project has been approved by ecological experts, thereby fulfilling one of the demands of the Odessa municipal council. Consequently, one hurdle has been cleared, which until now delayed the construction of the terminal. The ecological evaluation report was completed by British experts in conjunction with representatives of the Ukrainian Ministry of Ecology and Nuclear Safety. According to Anatoliy Duba, a deputy prime minister in the Ukrainian Government, who was present during the meeting, the construction of a terminal and an oil refinery complex in Odessa will cost 51 trillion karbovantsi [K], not including inflation. In the past few years, K700 million has already been spent on this project. Another issue that was discussed at this joint meeting was the issue of establishing an independent Ukrainian tanker fleet.

Parliament Approves Construction of Odessa Oil Terminal

WS2001125795 Kiev INTELNEWS in English
0346 GMT 20 Jan 95

[Report by Oksana Hasiuk]

[FBIS Transcribed Text] Kiev, Jan. 19—Ukraine's parliament, by a vote of 208 to 83, has decided to resume construction of the Odessa Oil terminal, a project that was halted last June by local officials concerned about its environmental impact. The project was approved over the objection of most Communist and Socialist deputies, including the 10 who represent Odessa itself.

According to the bill, which had been approved last week by a joint session of the key industries, energy and transportation and environmental committees, 48 hectares of land belonging to the joint stock company Hera and 10 hectares owned by local authorities will be allocated.

Despite the opposition from the left, the project has been hailed by national leaders as vital to the establishment of energy independence for Ukraine, which is almost totally dependent upon Russia for its oil supply.

"Regarding construction of the Odessa oil terminal, I would like to say that it does not mean that we refuse to get Russian oil," President Leonid Kuchma said at a Thursday press conference at which he announced the signing of a deal with Turkmenistan President Saparmurat Niyazov for supplies of natural gas.

"Russia remains our main oil supplier," he said.

REGIONAL AFFAIRS

Bjerregaard Gets Reluctant Parliamentary Approval

BR0901161495 Copenhagen DET FRI AKTUELT
in Danish 6 Jan 95 p 15

[Report by Ole Ryborg: "Ritt Nearly Flunks Exam"]

[FBIS Translated Text] Brussels—It was with considerable reluctance that the European Parliament's Committee on the Environment decided on Thursday to appoint Ritt Bjerregaard to the post of EU Commissioner with responsibility for the environment. After the committee's almost three hour hearing with Ritt Bjerregaard, many members of parliament (MEP's) were of a mind to have the future Danish commissioner fail her EU exam.

German member Karl-Heinz Florenz issued a furious press release in which he directly suggested that Ritt Bjerregaard be replaced by someone else for the environmental commissioner post. "The lady should be replaced as soon as possible by a competent and pro-parliamentary candidate," Florenz said. The German, who coordinates all environmental questions for the Christian Democrats, the second largest parliamentary group, sees Ritt Bjerregaard as a "serious problem for the approval of the new Commission."

Following the hearing Karl-Heinz Florenz described Ritt Bjerregaard as a person without "punch." "She could hardly give a positive answer to any question, and made a spineless impression on me," Florenz wrote in his press release. The German Christian Democrat was not alone in his criticism of Ritt Bjerregaard's appearance at the hearing. According to sources, several MEP's at a closed meeting of the environmental committee were of a mind to fail Ritt Bjerregaard. And the committee's chairman is now writing a letter to the chairman of the European Parliament pointing to Ritt Bjerregaard's "disappointing" appearance at the hearing.

MEP's criticize in particular the fact that Ritt Bjerregaard had not been briefed on the subjects and was unable to answer their questions at the hearing. Ritt Bjerregaard nearly slipped up several times during the hearing. For example she promised, to members' surprise, to use the legal basis of the single market in preference to the purely environmental articles of the Treaty of Maastricht. A promise which if carried out would mean that no member country would be able to go further than other member countries in the environmental area.

At the committee meeting, criticism of Ritt Bjerregaard was so sharp that, according to our sources, Ulla Sandbaek from the Juni Bevægelse (June Movement) intervened to defend Ritt Bjerregaard. "Those of us who know her know that she will fight for the environment," Ulla Sandbaek said, according to a source at the meeting. Other Danish members such as Social Democrat Kirsten Jensen and Radical Lone Dybkjaer did not get involved in the debate about the approval of Ritt Bjerregaard.

Parliamentary sources estimate that what finally saved Ritt Bjerregaard was that the Committee on the Environment was afraid of creating a very bad relationship with the incoming environmental commissioner if the committee recommended that she should not get the job. The committee's problem is that the new Commission must be approved as a block. For

this reason the Committee on the Environment cannot reject Ritt Bjerregaard alone. Parliament can reject only the whole Commission.

Bjerregaard Defines Future EU Environmental Policy

BR0901161695 Copenhagen DET FRI AKTUELT
in Danish 6 Jan 95 p 15

[Report by "RYB": "Ritt's Environmental Policy"]

[FBIS Translated Text]

During the hearing Ritt Bjerregaard outlined the broad directions of her environmental policy

Brussels: Pressed hard by members of the European Parliament's Committee on the Environment, Ritt Bjerregaard mapped out at a hearing in Brussels the directions in which she intends to take the EU's [European Union] environmental policy.

- The subsidiarity principle must not be misused as a means to reject EU rules in the environmental area. - Ritt Bjerregaard wants to work for open and transparent administration in the European Commission.

- The environment will feature more prominently in the EU's aid programs to central and east European countries as well as in the Mediterranean rim area.

- The environment will have a more prominent role after the change in the Treaty of Maastricht in 1996.

- All EU proposals officially put forward by the European Commission must be vetted for their environmental consequences.

- Ritt Bjerregaard also promised to work for access for Members of the European Parliament to the same background information as the Commission, when proposals in the environmental area are before the Parliament. - At the same time Ritt Bjerregaard said that she would investigate how effective the EU countries are at implementing the environmental rules upon which the EU member states have already agreed.

- No country should find itself in the situation of being forced to lower its own environmental standards, Ritt Bjerregaard said, with a clear reference to the three new member states, all of whom have higher standards than those which apply in the EU today.

- And finally Ritt Bjerregaard promised to investigate opportunities for keeping the European Parliament informed when the European Commission introduces proceedings against a country before the EU Court for failure to comply with EU environmental regulations.

Danes, Dutch, Germans Sign North Sea Coast Pact

95WN0058A Copenhagen BERLINGSKE TIDENDE
in Danish 8 Dec 94 p 13

[Article by Steen Voigt: "Joint Plan for North Sea Tidal Area"]

[FBIS Translated Text] In a few years the Danes, the Germans and the Dutch in the tidal area of the North Sea

will be able to work to protect and promote their natural areas, environment, and local interests on the basis of joint, supranational planning.

At a meeting in Leeuwarden in the Netherlands the three countries have just designated a joint cooperation area for which they will now draw up an administrative plan.

The plan is expected to be ready for the Tidal Area conference in 1997.

The cooperation area runs from north of Esbjerg, Denmark south to Den Helder in the Netherlands and extends three nautical miles out into the North Sea. It also includes existing bird sanctuaries, national parks, and conservation areas on land.

"This is the first time we have seen such a large joint supranationally designated area in Europe, which is a step forward in itself. And now we can begin to prepare a coherent unified policy for the North Sea tidal area," said section chief Torben Klein of the Forestry and Nature Agency's nature management division.

With the interests of local communities in mind, the plan will increase the possibilities of achieving previously set goals, i.e. primarily providing better protection for plant and animal life and natural areas, and at the same time strengthening viable economic development along the coast and on the islands.

AUSTRIA

Foreign Minister Mock Views Future in EU

AU0501083295 Berlin DIE WELT in German 4 Jan 95 p 5

[Article by Austrian Foreign Minister Alois Mock: "Austria Is Helping To Shape Europe"]

[FBIS Translated Text] Austria's entry into the European Union [EU] on 1 January 1995 marks the end of a political road that for 40 years has been aimed at integrating our country with Europe. During the era of East-West confrontation, when Austria's full membership in the EU seemed impossible, the country nevertheless worked hard at intensifying its relationship with Europe. Following numerous efforts, including joint efforts with other EFTA members, a milestone was achieved in 1972 with the conclusion of the free trade agreement. Thanks to this, Austria possesses closer economic links with the EU than some traditional EU member countries do.

After a period of stagnation, the process of integration experienced a boost in the mid-1980's. We soon realized that free trade on its own was no longer a sufficient basis for integration with Europe. Following domestic efforts to establish a broad basis of support, I submitted Austria's application to join the EU in Brussels on 17 July 1989.

The events that followed—the collapse of communism in Europe and the end of the Cold War—confirmed the correctness of this decision. These events suddenly created a new challenge for the European Community. It now became the center of political gravity in Europe and a point of reference for all European countries. Therefore, Austria's decision to integrate was primarily a decision to take active part in shaping the future of Europe, which is also the future

of Austria. Austria's EU membership will give Austria the opportunity to contribute its own ideas to common EU policy and, on participate on an equal basis in reaching decisions that will shape the future of Europe, and thus the future of Austria as well.

At a difficult time for the EU, at a time when there is increasing talk of "Europessimism" and "Euroskepticism," over 66 percent of the Austrian population expressed their conviction that there is no acceptable political alternative to a continuation of the integration and Austria's active participation in Europe. If the process of European unification is discontinued, Europe will be in danger of reverting to the age of nationalist power politics, changing alliances, instability, and warfare. Just as before, hopes for a permanent European order depend on European integration. This integration must be expanded. European institutions must be adapted to the new challenges. But the peaceful political basic concept of the European Community, the joint pursuance of sovereignty in common institutions, is no less valid today than it was 40 years ago.

In the present situation, this means that present and future members of the EU must seriously consider and implement a central idea put forward by Jean Monnet whereby problems can be developed into opportunities if one faces difficulties not with resignation, but with optimism. I am sure that if European governments act in accordance with this principle, the EU will emerge from present difficulties with renewed strength.

Common EU membership brings with it an unhindered development of economic trade free of barriers. Continuing on the basis of the existing free trade regulations and European Economic Area, Austria's EU entry will provide further impulses for the development of economic relations. This additional potential is urgently required in view of the present framework conditions for the European economies. The entrepreneurs and economic practitioners of our countries should take maximum advantage of it. Austria will continue the leading European role it has already played during the period of negotiations. Certainly, one of our priorities, laid down in the membership document, will be to verify common environmental norms. Wherever necessary, EU standards will be raised to the level of standards in force in some EU candidate member countries, so that EU environmental policy is provided with fresh impulses. Generally, Austria must help see to it that the implementation of environmental objectives is a leading feature of the integration process. In this regard, Austria will also support efforts for an even more environmentally-orientated European agricultural policy and a policy of clean development.

Austria will also encourage the highest European social standards and energetically oppose all attempts at social discrimination. Another task is to take maximum advantage of Austria's success in negotiations on the subject of traffic policy and do everything to rapidly implement the principles of a new European environmentally-friendly traffic policy as worked out by the European Commission during the negotiations on EU admission. Particular attention will be paid to European transit systems, especially because the construction of the Munich-Verona rail link, including a tunnel through the Brenner Pass, has already been declared a priority.

Because of its developed relationships with central, eastern, and southern Europe, Austria can make a particular contribution to the further development and success of the European unification process. Austria will be one of the EU countries that are particularly interested in EU membership of reforming countries of central and eastern Europe. Austria will insist upon rapid intensification of political dialogue with the reforming countries, and will encourage EU efforts to support the process of reform in the neighboring countries.

Austria will also support common European efforts in the sphere of security policy. As far as external security is concerned, the first task is to take advantage of the platform offered by observer status in the WEU and participation in NATO's Partnership for Peace. Also in the sphere of domestic security, Austria will be interested in enhanced cooperation if only because of its conspicuous location. This means especially, active cooperation within the framework of the Schengen Agreement and the Maastricht Treaty provisions dealing with internal affairs and justice.

Already in the very first months of its EU membership, Austria will help prepare for the great EU government conference of 1996. Austria wants to see a EU that is strong enough to genuinely bear its pan-European responsibilities, and will therefore work toward a more dynamic Europe that is better able to implement its actions. The clear outcome of the referendum on EU membership is a go-ahead for us to take part in managing the process of European integration. We envision a Europe that is unified despite variety, a Europe equipped with functioning democratic structures, a Europe that is committed to the principles of federalism and subsidiarity and permits regions and districts to play an increasing role in the integration process.

The first of January marked a new chapter in Austria's history. Thanks to membership in the EU, Austria can assume a place in Europe that accords with its destiny. In concert with its European partners, Austria can now help shape Europe's future more actively than before and help bring about a permanent European peaceful order.

Minister Rejects EBRD Support for Slovak Nuclear Plant

*AU1201195395 Vienna DER STANDARD in German
12 Jan 95 p 4*

["mai"-attributed report: "Mochovce Documents Are Inconsistent"]

[FBIS Translated Text] According to Environment Minister Maria Rauch-Kallat, the Slovak project documents on the Mochovce nuclear power plant, which were examined by a team of Austrian scientists, are "insufficient and inconsistent." "If these are all the papers on which the European Bank for Reconstruction and Development (EBRD) will base its decision in March, it can only turn down the project," Rauch-Kallat said yesterday on presenting the expert report, which is to be distributed all over Austria.

The environmental compatibility declaration does not contain any information on the dangers emanating from a

major, not "controllable" accident. It only deals with incidents within a circle of 100 km. Potential effects on Austria are disregarded because Mochovce is 120 km away from the Austrian border.

Regarding the efficiency examination, Rauch-Kallat noted that "certain assumptions were obviously altered in favor of Mochovce at the instigation of the EBRD." The minister suspects that money is to be saved in the area of safety measures, the final concept for which has not been made available yet. For example, there are no plans for adequate containment, which prevents the escape of radioactivity in the case of an accident.

On Friday, Rauch-Kallat will hold initial personal talks with members of the EBRD directorate to present them with Austria's reservations against Mochovce.

Vranitzky, Klestil Appeal to Slovakia Over Mochovce
*AU1401180595 Vienna WIENER ZEITUNG
in German 14 Jan 95 pp 1, 2*

[Unattributed report: "Appeals by Klestil and Vranitzky"]

[FBIS Translated Text] Upon request by Environment Minister Maria Kallat, President Thomas Klestil called Slovak President Michal Kovac by phone Friday morning [13 January], explaining Austria's ideas and desire to hold a public hearing [regarding the construction of the Mochovce nuclear power plant in Slovakia].

According to the president's office, Klestil also expounded on Austrians' concerns in connection with the planned nuclear power plant in Mochovce.

Kovac reportedly promised the Austrian president he would talk with the responsible Slovak ministers in the interest of harmonizing relations between the two countries.

On Friday, Chancellor Franz Vranitzky sent a letter to Slovak Prime Minister Vladimir Meciar, appealing to him to use his influence "to facilitate a public discussion according to European Bank for Reconstruction and Development guidelines."

The formerly "very cooperative attitude" of the Slovak Republic was highly valued both by the Austrian people and also by the Austrian Government. Now, however, the Austrian Government has to note that the operators do not seem prepared to compromise, especially regarding the participation of the general public.

"It seems to me that this greatly threatens the public debate to be held in Vienna on 23-24 January," the letter says.

On Friday afternoon, Austria also issued a memorandum to the Slovak Government in Bratislava urging Slovak participation in the Mochovce nuclear power plant hearing. Foreign Minister Alois Mock stressed that he is extremely interested in this hearing.

On Friday, Environment Minister Maria Kallat held unofficial talks with six EBRD (European Bank for Reconstruction and Development) directors in London. The EBRD directors, too, are aware of the fact that the Mochovce

project requires a far-reaching political decision, she said. "This case is a precedent for other projects," the minister stated.

In London, Kallat suggested among other things the formation of an international round of experts for the EBRD decision, which should consist of experts from the bank's member countries and Austria. Her talks were unofficial, "lobbying" so to speak. Official statements by the bank on licensing procedures for Mochovce are not anticipated for the time being.

"If a nuclear power plant in Mochovce is more expensive than the alternatives, we will not finance it," the EBRD vice president said on Thursday afternoon in London in a discussion with Global 2000 representative Phil Weller. This applies if the "least cost study," which has been drawn up at the order of the EBRD—which shows that the nuclear solution for electricity production in Slovakia would be 5 percent cheaper—proves incorrect.

However, the source information in the least cost study on the Mochovce nuclear power plant is wrong. This has been admitted by Dougall Scott of the British consulting company Putnam, Bartlett and Hayes, which was commissioned by the EBRD to draw up the least cost study. As a result of incorrect references to sources, external experts (such as the Austrian Nuclear commission) are unable to examine the plausibility of calculations that see the nuclear power plant as the cheapest version.

There is no reason to call the hearing into question, Greens security spokesman Rudi Anschöber said. In this connection, the Greens demand complete live coverage of the entire hearing by the Austrian Radio and Television Corporation.

Anschöber has also called for a "crisis summit" by the Austrian Government.

Liberal Forum Deputy Volker Kier sees the refusal of the Mochovce plant's operators to attend the planned hearing at the end of January as a provocation.

Two Slovak environmentalist organizations—Greenpeace and Deti Zeme (Children of Earth)—have also once again criticized the planned completion of the Mochovce nuclear power plant. They spoke of "ignorance" and a "lack of seriousness" on the part of authorities in Bratislava.

DENMARK

Minister Vows Continued Fight Against CO₂ Emissions

95WN0058C Copenhagen *BERLINGSKE TIDENDE*
in Danish 7 Dec 94 p 6

[Article by Kaj Skaaning: "Recovery Wrecking CO₂ Plan"—first paragraph is *BERLINGSKE TIDENDE* introduction]

[FBIS Translated Text] Industry can no longer economize its way out of increased energy consumption in connection

with the economic recovery. Now industry and the transport sector will have to bear the brunt of the government's effort to meet the goals for reducing CO₂ emissions.

The economic recovery is now having such a big impact in industry that businesses can no longer economize their way out of the increased energy consumption that goes with it.

"So far industry has been able to counteract increased energy consumption by economizing," said Energy Board director Ib Larsen. "But the economic growth has a rising tendency, so that is no longer true. Initially we will now try to find out why things have gone wrong."

Social Democratic Environment and Energy Minister Svend Auken's energy policy report to the Folketing spelled things out clearly. The government is 5-6 percent away from being able to meet its goal with respect to reducing CO₂ emissions. Therefore, according to Auken, a lot more must be done to achieve the goals. Efforts must be increased in three areas. Industry can look forward to a number of green taxes starting as early as the beginning of next year, the transport sector's energy consumption will be carefully scrutinized, and the European Union (EU) will be pressed to introduce common EU standards for how much electricity household appliances are allowed to use.

The government's goal is that by the year 2000 CO₂ will be reduced by 20 percent compared with 1988. And this cannot be done with the present development.

"The forecasts show that the deficit in relation to the goal has increased instead of shrinking," Auken said. "It is now estimated that the reduction will be only 14-15 percent, which gives us a deficit of 5-6 percent. Some Folketing members think the CO₂ tax should be totally eliminated. We will now show the Folketing that giving up on this point will make a bad situation worse. On the contrary, even more should be done."

Auken thinks the development can be changed without hurting competitiveness or employment.

"The industrial tax level is only a third of what households pay, and it is hard to understand the strong reaction," Auken said.

"Green taxes on industrial energy consumption are a quite necessary element in redressing the situation, and we will gradually introduce green taxes with full restoration of the proceeds. As soon as possible industry will be drawn into discussions of the taxes. We will be compelled to use the tax mechanism, and at the same time we will take a look at the transport sector, but there the solution will be found under different auspices (the Transport Ministry, Ed.)."

Auken mentioned other measures that have been delayed in relation to the goals in "Energy 2000."

They include such things as the conversion of electrically heated buildings to municipal heating.

"Conversion is proceeding much too slowly in this area," Auken said.

Expanded Recycling Effort Announced

95WN0058D Copenhagen BERLINGSKE TIDENDE
SONDAG in Danish 11 Dec 94 p 9

[RITZAUS BUREAU (RB) report: "Round-Trip Ticket for Recycling"—first paragraph is BERLINGSKE TIDENDE SONDAG introduction]

[FBIS Translated Text] It will no longer be possible to send tires, cars, refrigerators, and freezers as well as electrical and electronic equipment out for consumption with a one-way ticket.

A report from the Environmental Protection Agency sets the stage for a return system that can guarantee environmentally sound handling when items in the four product groups are junked.

"The first item on the agenda is a return system for tires. Protracted discussion of the issue in the European Union (EU) has delayed this matter for a year, but now the Environment Protection Agency is ready to draw up an agreement with the organizations. The idea is that the public sector will pay collectors of used automobile tires 900 kroner for every ton," the Technology Board wrote in its newsletter.

"The next item is automobiles. It should be possible to draw up an agreement within half a year," estimated Peter Grau of the Environmental Protection Agency's industrial waste office.

The idea is to expand the scrap premium system to include a requirement for a scrap certificate from an approved scrap yard operator. The proper removal of refrigerators and freezers will be financed via trash removal fees.

The system can be implemented within a year.

Minister Sets Out Ground Water Cleanup Effort

95WN0058B Copenhagen BERLINGSKE TIDENDE
in Danish 2 Dec 94 p 5

[Article by Pauli Andersen: "Dirt Fill Threatens Ground Water"—first paragraph is BERLINGSKE TIDENDE introduction]

[FBIS Translated Text] With almost no supervision gravel pits have been filled in with dirt that the authorities considered clean. But often the dirt is polluted, and Svend Auken (Social Democrat) will now make a big effort to end the threat.

Mountains of dirt from construction sites are a new and unexpected threat to Danish drinking water. In the past the dirt has been used extensively to fill in Danish gravel pits because the authorities thought it was clean.

But builders must now be prepared to find other places in which to dispose of the superfluous dirt from construction work and pipe renovation. The dirt is often so polluted that it is a substantial threat to the ground water.

And Environment Minister Auken admits that the polluted dirt fill in the gravel pits is a problem that has been overlooked to some extent.

"We must really work hard on the gravel pit problem in the future. What this really involves is camouflaged dumps in the places where gravel pits have been filled with polluted dirt," he said.

Against the background of the new knowledge concerning the threat of dirt fill to the ground water the Forestry and Nature Agency has just sent a recommendation to the counties.

"We have asked the counties to issue new permits for the extraction of raw materials on condition that extractors cannot count on being allowed to refill the pits with dirt," said Birgit Herslund, section chief in the agency's ocean and raw materials office.

Ban on Depositing Dirt

The Forestry and Nature Agency is working with the Environmental Protection Agency on a joint survey of which types of dirt are polluted and the best possible way to remove it. From what BERLINGSKE TIDENDE has learned there is a proposal on the way from the agencies for a general ban on depositing dirt fill in gravel pits.

The country's biggest "waterworks," Copenhagen's Water Supply, regards the problem of polluted dirt as especially urgent.

"Receipt of the dirt is impossible to supervise. In Roskilde County alone, where we get a large part of our water, there are 19 gravel pits that have permits to accept returned dirt," department head Jens Andersen of Copenhagen's Water Supply said during a hearing on water pollution at Christiansborg [parliament building] yesterday.

During the hearing Environment Minister Auken presented a 10-point plan for protecting ground water and drinking water.

A more effective cleanup of the country's waste dumps and a number of steps for reducing the use of fertilizer and sprays are the main elements in the minister's ground water package.

[Box, p 5]

Polluted Dirt Gives Poor Drinking Water

Total returned dirt: 2.2 billion m³ a year. Possibly polluted: 293,000 m³ a year. Actually polluted: 85,000 m³ a year.

Estimated benzene pollution of ground water if only 5 percent of the dirt is polluted: 0.5 mg per liter or 500 times higher than the limit for drinking water.

Denmark's Sea Waters Short of Oxygen

The water environment plan, with a price tag of 12 billion kroner, has still not produced a decisive improvement in Danish water environment. There is less and less oxygen in the Kattegat.

The sea around Denmark is having breathing problems.

The concentration of oxygen in the Kattegat has declined steadily since 1960, and today there is generally less oxygen in the sea than ever before.

This is apparent from the measurements that Professor Bo Barker Jorgensen presented yesterday during a hearing on water pollution at Christiansborg.

Jorgensen, who is head of a German institute for ocean pollution and microbiology, paid special attention to the undiminished nitrogen concentration as the cause of the reduced oxygen.

His information is in line with the contents of several brand-new reports from the Environmental Protection Agency and the Danish Environment Survey (DMU) respectively.

The water environment plan has not produced the desired reduction in the discharge of nitrogen, and this is a substantial reason why the fjords, lakes, streams, and internal waterways are generally in no better shape than they were five years ago.

According to the DMU, surveys of agricultural practices have shown that animal fertilizer is being utilized a little better. But at the same time the DMU established that farmers still use 20 to 30 percent more fertilizer than crops need.

In a new overall review of water environment the Environmental Protection Agency concluded, among other things, that there is a "distinct need to reduce the nitrogen discharge from cultivated land."

Only Third of Lakes Meet EU Purity Standards

95EN0085A Copenhagen BERLINGSKE TIDENDE
in Danish 26 Dec 94 p 4

[Article by Troels Mylenberg and Jakob Elkjaer: "Futile Efforts To Achieve Clean Lakes"]

[FBIS Translated Text] *Pollution: Only one out of three Danish lakes is clean enough to meet the European Union [EU]'s goal of clean water in lakes.*

Too few predatory fish, too many trash fish, and toxins on the surface. That is the situation of many Danish lakes. Only one out of three Danish lakes meets the EU's goals for clean lakes, one that should have been met as long ago as 1985.

The pollution in lakes means that plants on the bottom are dying. Trash fish eat most of the animal plankton, which should have eaten the plant plankton, which is now growing unhindered. A vicious circle is underway in which the lakes' stock of fish is changing into an army of trash fish such as roach and bream. In many lakes visibility can only be measured in centimeters.

"We are awfully fed up with this, because it isn't natural. We could have outstanding conditions for sport fishing in Denmark. But too little is done to fight pollution. There are too few resources and the root cause of the problem—agriculture—is not being dealt with," said Mogens Jorgensen, the president of the Danish Sport Fishing Federation.

In the [individual] counties futile attempts are being made to improve conditions, but ever since 1990 the number of clean lakes has not risen.

"The goals are dated, because there's another type of waste water we have got now. It is my opinion that no thought whatsoever was given to the pollution caused by agriculture when the goals were established," said biologist Claus Nielsen of Bornholm County, which, however, is one of the places in which most of the lakes meet the goals.

The 1987 water environmental plan has affected industry's and cities' water treatment plants. They almost met the requirements in 1993. The problem is now waste water from scattered settlements that are not connected to a sewer and agriculture. But in this respect the counties find themselves between a rock and a hard place.

"The individual towns have to draw up plans according to which they will do their part so the goals are met. But we will not approve those plans, we have no opportunity to intervene if the towns are not strict enough," said biologist Claus Koch from West Zealand County.

In 1992 the Environment Directorate had to acknowledge that even if every single discharge from industry and municipal treatment plants were removed, that would not be enough to ensure that lakes could meet the EU requirements.

At the county level they are tired of either having to violate the [water environmental] plan law by using the goals the directives prescribe and which everyone knows cannot be met within the four-year period, or having to "bend" the goals in the EU directive, which was incorporated into Danish environmental law in 1983.

"Either you can say you have a great law and good directions and administer your area according to them. Or you can do what we have done: rearrange our own goals around the discharges. This is in conflict with the directive, but we cannot comply with it," said Claus Koch, a biologist in West Zealand County.

EU Expected To Demand Lakes Cleaned Up

95EN0085B Copenhagen BERLINGSKE TIDENDE
in Danish 28 Dec 94 p 8

[Article by Jakob Elkjaer and Troels Mylenberg: "The Land of Dirty Lakes"]

[FBIS Translated Text] *Pollution: Denmark's ranking as a European Union [EU] environmental top dog could drown in those Danish lakes that do not come up to the EU's standards.*

When Tage Meincke of Gentofte takes an inexperienced sport fisherman with him to a Danish lake on a warm summer's day, he offers a piece of good advice: "Take a bottle of clean water for the dog!"

It would be a pity if what happened to several dogs that drank out of Knudso near Ry in Arhus County happened to the friend's dog. The dogs died in ten minutes from a toxin discharged by malodorous blue-green algae.

Poul Nordemann Jensen, a biologist in Arhus County, explained what happened to the dogs.

"It was nerve and liver toxins that more or less dissolved the liver. The dogs are paralyzed, experience tremors and die very quickly. Now people are careful to keep their dogs on a leash," he said.

Over the past few summers, ducks and grebes have also lost their lives. They came to drink the water that is the basis for their existence.

On a warm, quiet summer's day, most of Denmark's low-water or small lakes are covered by a layer of blue-green algae that lies on top of the lake like a malodorous carpet. The reason fishing can still go on in the poisoned lakes is that the fish do not ingest the toxin.

So in the summer Lake Bagsvaerd is devoid of sports fishermen. But in the wintertime they flock there even if the lake is still murky. Sports fishermen have defied the authorities and even released zander, a predatory fish that can hunt in the darkness, as opposed to ferocious pike with their saw-toothed jaws, which have disappeared from many Danish lakes.

"I belong to that generation of sports fisherman that has learned that this is the way a Danish lake looks," said 34-year-old Tage Meincke.

"We grew up with pollution and that is the way we recognize the landscape. We are surprised and happy when we can see 35 centimeters down into Lake Bagsvaerd."

"But when all of it gets too unappetizing, we go out on the Oresund."

Tage Meincke also belongs to that generation of sports fishermen who have learned to use pollution when they go fishing. When the wind blows after a warm summer day, sheets of blue-green algae move across the lake and predatory fish go to the banksides near the deepest parts of the lakes. Tage Meincke is not in favor of this becoming known, but fish can be had here.

Turbid With Plankton

In the big lakes, the typical picture is for the water to be turbid owing to the plankton that flourishes in the water which has been polluted with phosphorus. According to the Environment Directorate's report, *Water in the Environment, 1992*, you cannot see more than one meter down into the water in one-half of the big Danish lakes.

Plants on the bottom are dying. Trash fish are eating most of the animal plankton, which should have eaten the plant plankton, which can now grow unhindered. A vicious circle has started, and the lake's fish stock is changing into an army of undernourished trash fish such as roach and bream.

When the environment law came into effect in 1974, it became the counties' duty to establish a goal for water quality in Danish lakes. But the counties did not have to set a year and a date for when the goals were to be met.

In 1978, the EU Commission played its trump card. According to "the directive on bodies of fishing water," Denmark was supposed to establish goals for all of the approximately 600 lakes covering more than three hectares. Denmark was allowed to choose from among ratings of A, B, or C. Denmark gave most lakes a very optimistic B rating as fishing lakes, where pollution "influences overall animal and plant life only slightly."

Counties Rebel

The directive made Denmark live up to the goals by 18 July 1985 at the latest. But Denmark could not do so then and it still cannot. Between 1990 and 1993, it appears from the counties' evaluative reports that two-thirds of lakes still did not meet the standard. Denmark is thereby violating the directive, which was incorporated into Danish legislation in 1983.

At the county level they are tired of sending forms about big local lakes back to the Environment Directorate on which a small minus sign appears under the heading "goal achieved."

"You cannot behave as if everything was so wonderful when we do not get any resources to live up to the goals. Many lakes will not be able to comply with the standards in the next few years," said Ebbe Olesen, the head of the environmental office in Roskilde County.

The counties feel they are in a bind. They can only make direct demands on municipal water treatment plants and the most polluted segment of industry. However, the counties cannot make demands where pollution caused by agriculture is concerned and discharges from the approximately 200,000 Danish houses without sewers. They discharge their waste water directly into lakes, rivers, and waterways.

Towns are responsible for taking action on household wastewater and the counties cannot intervene even if towns fail to follow the recommendations in the counties' regional plans. So there are no consequences for towns if they pay no attention to the counties' recommendations.

"It is as if you had a traffic law in which nothing was said about who should step in if you are driving too fast. Because there is nothing about who needs to step in when towns disobey the law," said Claus Koch, a biologist in West Zealand County.

For this reason, the counties have written these attractive goals into their regional plans, well aware that they cannot be achieved over the plan's four-year period in accordance with the law.

But now several counties have begun to revolt. They are simply changing the goals for what can be managed within the planning period: Direct discharges of wastewater. This is happening in Arhus, West Zealand, and Roskilde Counties, among other places. But those counties are not alone in their criticism of the system.

"The goals are dated. Absolutely no thought was given to agriculture when they were established," said Claus Nielsen, a biologist in Bornholm County.

"Typical Danish Swagger"

The unmet goals, according to Peter Pagh, a senior lecturer on EU environmental law at the University of Copenhagen, are the result of typical Danish swagger in relation to the other EU countries.

"Denmark is always busy telling the other EU countries how good we are and how bad the other countries are at meeting EU environmental regulations. It could be they are now getting their revenge. We certainly have a tradition of opting

out of highly ambiguous goals when the political will is not there to allocate the necessary resources," Pagh said.

This analysis is confirmed by Mogens Moe, the former head of the Environment Directorate's assessment office.

"If you compare the regional plans' goals with the true state of the water, you have to call these very ambitious plans—and that's the way it has been ever since the first plans came out a good 15 years ago. Nor does the trend point unambiguously in the direction the plans are preparing for. Where lakes are concerned the general picture is a poor one, and there are only very isolated improvements."

So wrote Mogens Moe in his latest book on environmental law this year. The former department head at the Environment Directorate also comes right out and writes that among other things Denmark is not meeting the standards in the EU directive: "The directive also requires that in the course of five years the member states bring the actual condition up to the directive's requirements, and this has not occurred."

At the Environment Directorate director Erik Lindegaard would not immediately acknowledge that Denmark was disobeying the EU directive even if he conceded that the many violations of standards "indicate that one thing or another is wrong."

"The basic assumption for this discussion is that there really is a violation or a conflict with the EU regulations on a major scale. If there is, so far I have not seen it," he said.

Yet he does not believe it is the Environment Directorate's responsibility, because it is the counties that have the supervisory authority.

"But we certainly do not have such supervisory authority over a county or a town. We can point out if things ought to be done a different way. But we cannot impose sanctions. We cannot hit them over the head," Lindegaard said.

But it is not that easy to deny responsibility, Peter Pagh, the expert on EU environmental law, believes.

"This is not just fiddle faddle here. When you approve a EU directive, then in the long run the Commission must naturally insist that it be upheld. This is a special authority obligation that is higher than national legislation, and it runs down through the entire system, down to the government, the Environment Directorate, the counties, and towns."

EU Suit Against Denmark

That is why Peter Pagh predicts the EU will file a suit against Denmark and that Denmark will lose this suit at the EU Court of Justice. That would mean billions [of kroner] in expenditures for Denmark, which could be forced to write the conditions into legislation. Interest organizations such as, for example, the Danish Nature Preservation Federation or the Danish Sport Fishermans Federation, can appeal to the EU Commission and ask it to file a suit with the EU Court of Justice. The Commission is not obligated to file such a suit. But according to Peter Pagh the practice is that the Commission does so if the reason [for it] is good enough.

"You have to say that 16 years of violations has to be a reasonable basis on which to file a suit. Furthermore the next environment commissioner will certainly be Ritt Bjerregaard. And having a Dane in the position will mean we have got to be a leading country," Pagh said. He further believes the Environment Directorate ought to have intervened.

"In the future the directorate cannot know about something illegal without doing something. They have to react—and ought to have done so a long time ago," Pagh said.

New Danish Goals

In the wake of BERLINGSKE TIDENDE's 26 December revelation of Denmark's violations of the EU directorate, Environment Minister Svend Auken (Social Democrat) said that clean water in Danish lakes and rivers will be the most important environmental policy goal for the new year.

The environment minister stated he would negotiate environmental fees with agriculture and intervene with households that had no sewers.

The problem is that the sins of the past have reared their head in the form of phosphorus at the bottom of lakes. It can only be removed from the lakebed slowly and creates further ecological imbalance. For this reason speedy compliance with the goals requires that the beds of many Danish lakes be scraped free of phosphorus. And that is expensive, as has been shown in those places in this country where attempts have been made.

In Lake Brabrand in Arhus, which covers 150 hectares, it cost 25 million kroner.

"It is hard to get rid of the mud. Because farmers do not want it unless we put it out on the fields ourselves," said Poul Nordemann Jensen, a biologist in Arhus County.

Roskilde County has allocated 30 million kroner to remove phosphorus-laden mud from Lake Gundsomagle, which covers 30 hectares.

"On top of that there are the expenses for surveys for the next ten years—and then the problems of getting rid of the mud," said biologist Jorn Rasmussen of Roskilde County.

About 400 of Denmark's 600 lakes covering more than three hectares do not comply with the EU's environmental standards.

FINLAND

Environment Policy Impact From Joining EU Aired
95WN0052A Helsinki HELSINGIN SANOMAT
in Finnish 25 Nov 94 p 2

[Guest Commentary by Jouni Alanen: "Much Work Needs be Done in EU Regarding Environmental Taxes"]

[FBIS Translated Text] The author is an EU jurist with Ymparisto ja Liikejuristit Inc. The article is based upon a recently completed research project that deals with means to politically effect environmentally sound economic policy direction and domestic markets within the EU.

The Nordic countries are pioneers in environmental taxation. In addition to a carbon dioxide tax we use an abundance of various product taxes such as a disposable bottle tax, plant spray tax, and a fertilizer tax.

Within the EU the only country to protect its environment with taxation is Nordic Denmark. The EU is, indeed, headed in a direction to increase the use of environmental taxes. The member countries have, however, been passive and have not wanted to subject themselves to a supranational tax directorship.

Environmental taxation is consistent with a so called enviro-economics approach. The polluters: industry, business, and consumers pay for consuming the environment. The environment is regarded as a factor in production right along with capital and labor.

The market forces will assure that pollution and consumption of natural resources will be decreased, particularly wherever this can be done with the least financial sacrifice. In this way environmental conservation is linked with economic policy and the principle that "the defiler pays" becomes reality.

Environmental Taxes Have Potential for Protecting Own Production

Using enviro-economic principles to steer policy decisions saves money and leads to cleaner technology. Traditionally this has been effected by officials determining emission limits, the economic carrot for reducing emissions below a certain limit is lacking, however.

For the person charged with the latchkeys to the state treasury, environmental taxes are merely a means to increase income. We, too, have recently experienced this as the cabinet patched up the budget with last minute increases in energy taxes.

The prerequisite for using environmental taxes as a means for conserving the environment is that there be a cleaner alternative to a product. The lighter tax on unleaded gasoline has led to the rapid disappearing of leaded gasoline on European markets. Taxes on motor vehicles and fuel tax increases are, however, primarily means to collect revenue. The level of taxation would have to be very high before it would significantly reduce the use of motor vehicles.

The ideal situation in environmental taxation is that the tax amount would be determined by the quantity of pollutant and by the degree to which it harms the environment. This is often impossible, however, since there would be so many things to measure (motor vehicles) or because a clearly determinable measurement site is not available (fertilizers dissolving from farm fields into surface waters). In practice the taxation, therefore, is usually based on how much of an environmentally harmful substance is contained in the product (for example the nitrogen in fertilizers).

In practice this tax is often placed on the product instead of production for the reason that this has less detrimental effect on an entity's own industrial competitiveness. You see, a tax on a product can be levied on imports as well. Exported products, for their part, can be exempted from the tax so that they do not suffer competitively on the export markets.

The regulations of the EU and Gatt (WTO) prohibit, instead, this compensating for failure to tax production by levying the equivalent tax on imported products.

The implementation of environmental taxes in the EU is hindered by the requirement of unanimity on tax coordination. The failure to implement the carbon dioxide tax, which has been accepted in principle, is due, on the other hand, to issues of competitiveness.

The other side of the coin in the desire of member nations to keep taxation prerogatives in their control is that environmental taxation can be used to protect one's own production against foreign competition. Placing imported products at a disadvantage via taxation is, to be sure, prohibited, but the member nations are free to select the entities on which they wish to place environmental taxes and their progressive scales in such a way that they are most detrimental to foreign products.

If a member country wishes to prevent the sale of an environmentally detrimental product within its markets, it can do so by either banning the sale or levying such a prohibitively high tax that marketing is impeded.

In the previously mentioned case, the EU judicial court requires that environmental benefits be measured against the detrimental effect on commerce. The member countries are permitted to control the level of environmental protection in their own territory, but unreasonable barriers to free trade is prohibited. If, on the other hand, the sale of a product is simply prevented by an excessive tax, it is not necessary to make a comparable comparison, but all is okay as long as the tax does not disadvantage imports.

Finland has recently experienced even this neo-protectionism. Greens in Belgium managed to get an environmental tax passed a couple of years ago that was meant to be levied against beverage containers, disposable razor blades and cameras, batteries and paper, among other things. The objective was to alleviate Belgium's severe problem with landfills.

This development is particularly a threat to Finnish paper production industry, because a high ecotax is levied on paper that does not contain a predetermined percentage of recyclable fibers. It is appropriate to ask how much would the use of recyclable paper fiber as a raw material in Finnish paper actually reduce the dumping volume in Belgian landfills? And also: is there a shortage of suitable wood in Finland, and should Belgium be concerned about our supply of trees?

Belgium's ecotax method is generally judged to be poorly put together, unreasonable and protectionistic. Unfounded impediments to trade should likewise be regarded in the same light, regardless of how they are implemented. The EU judicial court must boldly assert itself again in developing a code of justice for the EU.

Environmental Considerations Included in Tax Coordination Efforts

What are the changes that the EU will bring as compared to the arrangement with the EEA? Both treaties contain the prohibition to tax exclusively. But the EEA lacks the provision to coordinate the internal taxation methods of the member countries.

Even though environmental taxation in its true meaning has not actually been advanced in the EU, environmental considerations have been included in the tax coordination efforts. Proof of this is found in the fact that the membership negotiations gave us a right to continue favoring fuel oil without sulfur and purer gasoline in our fuel tax policy. This is an exception to the general EU policy directive on fuels.

Above all, EU membership will grant us the opportunity to maintain our competitiveness while promoting European environmental taxation, and to actively work on behalf of the European environment.

Finland Sees Russian Fees, Taxes Threat to Environmental Aid

95P20353A Helsinki HUFVUDSTADSBLADET
in Swedish 16 Dec 94 p 5

[Finnish News Bureau article: "Environmental Cooperation with Karelia Threatened"]

[FBIS Translated Text] Environmental cooperation between Finland and the Karelian Republic threatens to be undone by Russian customs and taxes. "Projects which have already gotten underway run the risk of ceasing, unless a solution is found to this problem," said Kaj Barlund, Director of the Waters and Environment Administration, in Joensuu on Thursday [15 December].

According to Barlund, attempts are being made to gain exemption from Russian customs duties and taxes for environmental projects which the Finnish state supports economically. He pointed out that know-how in connection with environmental research and protection activities are an important part of Finland's cooperation with the nearby region.

Barlund on Thursday dedicated North Karelia's renovated and expanded laboratory in Joensuu. In his speech he took a position on the ongoing conflict between advocates of protecting old forests, and those complaining of the poor employment situation within the forestry industry in the province [of North Karelia]. He proposed a forestry conservation jobs program which would create jobs within 15 to 20 years. The projects would include such activities as restoring drained marshes to their natural condition, and conservation of traditional landscapes.

Expansion of the laboratory in Joensuu has cost a little over 6 million markkas.

GERMANY

Expert Views Goals of Berlin Climate Summit

AU0501093095 Frankfurt/Main FRANKFURTER
RUNDSCHAU in German 3 Jan 94 p 6

[Interview with Harmut Grassl, UN chief coordinator for climate research, by Joachim Wille; place and date not given: "What Is the Alternative? Virtually Nothing."]

[FBIS Translated Text]

Wille: Mr. Grassl, environmentalists are pessimistically predicting that the UN climate summit will be a gigantic flop. Will the Berlin conference blow nothing but hot air?

Grassl: Why should it be a flop? Environmental associations have not realized that large international conventions are not implemented on one specific date but many different ones. I hope that things will be as they were regarding the Montreal protocol for the protection of the ozone layer: First the countries agreed on the principle of relinquishing the ozone destroyers, then dates relinquishing them were subsequently advanced when scientific evidence of the substances' dangerous nature began to accumulate. I tell all the environmentalists who complain: One year later the next conference will occur, and a year after that there will be another conference. Then the screws will be tightened and the goals will be detailed.

Of course, as a scientist I think that all this is far too slow. More than two-and-a-half years have passed since the earth summit in Rio, but the reduction of gases that cause the greenhouse effect has not been tackled properly anywhere; one can observe only accidental successes in the collapsed East Bloc. Nevertheless, I would never say: Then let us give up. What is the alternative? Virtually nothing. I am glad that more than 100 states have ratified the climate convention. And if, at some time in the future, perhaps before the year 2000, the industrial countries jointly set down dates to reduce rising emissions of greenhouse gases to the 1990 level, this will bring about a change in the trend. Everyone knows that this is far too little to lastingly prevent massive changes in the climate. But nothing can be gained by force.

Wille: But individual climate protection pioneers can show how things work. The FRG has decided to reduce carbon dioxide, the most important greenhouse gas, by 30 percent by the year 2005; most other industrial countries are still hesitating.

Grassl: A European Union working at a snail's pace with the goal of reducing carbon dioxide emissions to the 1990 level by the year 2010 is better than a pioneering FRG accompanied by mocking laughter from the British and the French about how these Germans are once again acting up even though there is no particular problem....

The pioneers must not advance so far that others miss the connection. I have been taken aback by the accusation of a U.S. official, who said about Bonn's actions at the preliminary negotiations for the Berlin conference: "You Germans were in the lead—but so much that we were no longer able to see you." The main mistake of the delegation from Bonn was that it had talked too little with the European partners about what the basic paper for a Berlin carbon dioxide protocol should look like.

Wille: Shortly before the deadline a draft for a carbon dioxide protocol was presented after all. The group of island states, particularly threatened by the climate change, suggests a commitment by the industrial countries to a 20 percent reduction by the year 2005.

Grassl: From a purely technical point of view, this is correct. However, from the viewpoint of many countries, it is pure illusion. One must admit that not only our climate system but also our economic system is extremely complex. And we want to continue using the economic system while reforming it in such a way that it no longer disturbs the climate system as much as it does now. If we reform it too much and too quickly, we will not achieve what we want.

Thus, we must proceed step by step, because no one knows how much one can interfere before this system no longer does what it should do. The economic upheaval in Eastern Europe with reduced production and a reduced energy consumption in these energy wasting economics has given us—no matter how macabre this sounds—a breather of about one decade regarding carbon dioxide emissions. This opportunity must be seized.

Wille: Is it not also necessary for the Third World to quickly reduce greenhouse gases?

Grassl: According to the climate convention, it is not supposed to do anything for the time being. We have only one chance to bring about global actions: During the first decade of implementing the climate convention the industrial nations must show that they can stop wasting energy and that the less developed states then take over the more efficient technologies. An attempt to introduce a commitment from the development countries into the convention now would doom it to failure. The Third World is justified in not permitting anyone to prohibit it from developing. Now, when some threshold countries, such as South Korea, have really started a dynamic economic development, they do not want anyone to tell them what to do. I can only say: Hands off from demanding commitments from developing countries already now. The only thing that they have to do is draw up as precise inventories of the greenhouse gas sources in their countries as possible. For this purpose, they may demand scientific aid from the industrial countries.

Wille: Now let us address climate research: How reliable is knowledge about the future of Earth's climate?

Grassl: The greatest aim of the global Climate Research Program is to make predictions over decades and to separate the man-made share in climate changes from natural fluctuations. We are certain that the already observed warming has basically been caused only by these two factors and not by volcanoes or the sun. In addition, forecasts for individual regions are to be made. While in the past we were able to speak only generally about a rise in the world's median temperature, now we have different statements on the southern and the northern hemisphere, on continents in contrast to oceans, and on the emerging shift to the north of the zones of summer drought. Soon, we will also be able to make predictions for parts of continents.

Wille: Climate researchers—for instance those in the Max-Planck Meteorology Institute in Hamburg—are working with a new computer generation. What can it do better than the old one?

Grassl: The point primarily is the higher resolution. In Hamburg the German climate researchers now have a climate model with a mesh size of 120 km. The rule of thumb is: One should never carry out regionalizations of the climate for areas below the fourfold mesh size. This means, that now statements for areas of 500 by 500 km are possible on principle. In the past the mesh size was 500 km, which mean that statements for areas under 2,000 by 2,000 km were taboo for science. One could never have said: The climate change means this for northern Germany and that for Italy. Now this is slowly becoming possible, if, at the same time, the treatment of cloud cover is improved.

Wille: What is known about the effects of climate especially in the FRG?

Grassl: In regions of middle latitudes, such as Germany, there will be more massive temperature changes in winter than in summer. We will get more wind from the west and a reduced frequency of the typical weather from the east; for decades we have observed that no longer is there hardly any incidence of 14 days of cold air from Siberia in Germany anymore.

Wille: This does not sound very dramatic.

Grassl: I know. Therefore, I am adding something: If the median temperature rises, this also changes the weather extremes, and this hurts. One does not notice that temperatures in Germany have risen half a degree; a human being is not sensitive enough for that. But one notices that suddenly the water for the old trees is lacking because of a few weeks of drought in summer and generally higher temperatures; or that the farmers turn to the Federal Government and demand compensation for crop failures; or that the Rhine is suddenly no longer navigable during dry summers, because it is fed by the glaciers in the mountains and they have disappeared to a large extent. Because this is so important, the next big status report on global climate research will contain a special chapter on extreme values. In this chapter we do not claim that we can already see these trends, but we claim that it is scientifically logical that, if the median value shifts, new weather extremes will develop.

By the way, the insurance sector has already been aroused. Rueck in Munich, for instance, keeps warning of drastic climate changes because it notices how its billions of marks are devoured by storm damage and how it has to raise premiums again and again. Damage by earthquakes go up hand in hand with the increase in insured property, but damage by storms is exploding. Something must have started there, even though one cannot yet prove in the weather statistics that now there are more extremes than 20 or 30 years ago. The insurance people say: We see it, we are paying more and more.

Wille: Do you see a connection between the weather extremes over the past few years, the spring storms, the hot summer of 1994 and climate development?

Grassl: It is difficult to explain why we are not yet linking these things. First, one must use global climate development as a foundation. There is no use saying after an extreme July like 1994 in Central Europe: Now we see it, this is global warming. The only conclusion that I, as a researcher, draw from that is the following: Such summers, which are hardly bearable for many people, will occur more frequently in the future if the median temperature shifts.

If someone asks people whether there was more snow in the past, as a normal citizen I would answer spontaneously: yes. However, I would have to accept the information that longstanding records do not show a clear trend. Already in 1810 there were winters with extremely little snow.

Wille: Are there other indications?

Grassl: Other signals are clearer: For instance, the area in Eurasia that is usually covered by snow at the end of February has shrunk by 10 percent, that is, several million

square kilometers over the past decades. At the same time, there is a massive reduction of snow cover in the Swiss central region and in other low regions. However, one cannot see such a development in the well-known skiing areas or—for instance—in Berlin. One sees that this is a very complicated matter. However, it is undisputed that the ice on the oceans has declined clearly in parts.

However, for me the most dramatic signal is the almost global shrinking of mountain glaciers. This has been precisely monitored since 1954, and since then the thickness of the ice has been shrinking, since the 1980's by as much as 40 cm per year. However, here too we have to make certain qualifications: We do not know for sure whether this warming has been caused exclusively, mostly, or only partly by man.

Schroeder, Rexrodt Agree on Energy Talks in February

AU1701145195 Frankfurt/Main FRANKFURTER ALLGEMEINE in German 17 Jan 95 p 12

[Report signed "hal": "Schroeder and Rexrodt Agree on Energy Talks in February"]

[FBIS Translated Text] Bonn, 16 January—At the beginning of February the talks between the political parties, the energy producers, the trade unions, and the associations, which failed more than a year ago, will be resumed. This has been agreed by FRG Economics Minister Guenter Rexrodt (Free Democratic Party) [FDP] and Lower Saxony Minister President Gerhard Schroeder, Social Democratic Party) [SPD], in Bonn. On 18 January Rexrodt wants to talk about mining with the representatives of the coal-producing laender; on 27 January preliminary coalition talks about the energy consensus are to be held in the chancellor's office. Subsequently, Rexrodt intends to issue invitations for new formal talks about the consensus. Schroeder expects that he will keep the SPD's negotiating mandate, which he had more than a year ago. An energy consensus is absolutely necessary for Germany as a business location, Schroeder said.

Schroeder once again demanded that the amount of subsidies for hard coal up to the year 2000, which was promised in the energy article law, is not called into question. Rexrodt agreed with the view of his Bundestag group chairman, Hermann-Otto Solms, that the subsidies should be negotiated again but that the FDP will not abolish the subsidies if the negotiations do not yield results. Schroeder calls for opting out of nuclear energy. However, he is willing to accept continuing development and research in the field of nuclear energy. Schroeder has not said clearly whether this would include the construction of a completely new, inherently safe type of reactor. Rexrodt, like industry, wants the construction of new nuclear power plants to remain an option for the future. However, how much longer the current 21 nuclear power plants remain operating can be discussed. Above all, the laender must speedily ensure the disposal of spent fuel.

After his meeting with Schroeder last Friday, Bavarian Minister President Edmund Stoiber (Christian Social Union) said that he thinks the differences with the SPD can be bridged. However, Bavaria is relying very much on

nuclear energy. FRG Environment Minister Angela Merkel (Christian Democratic Union), whom Schroeder wanted to meet on Monday evening, said in Bonn that renouncing nuclear energy and the development of new reactors is irresponsible. If all nuclear power plants were shut down, carbon dioxide emissions would rise by 10 percent or 150 million tonnes. She pointed out the Federal Government's goal of reducing carbon dioxide emissions by 30 percent by the year 2005.

Environment Minister Favors Introduction of Energy Tax

AU1901165295 Munich SUEDEUTSCHE ZEITUNG in German 18 Jan 95 p 23

["free"-attributed report: "Merkel: Electricity Should Not Be Cheaper for Consumers"]

[FBIS Translated Text] Bonn—In the discussion on the financing of coal subsidies, Environment Minister Merkel has come out in favor of budget economies combined with the taxation of energy. An exclusively budget-based form of finance as proposed by the FDP [Free Democratic Party] is not only unrealistic, but would also lead to an undesirable reduction in electricity prices in environmental policy terms, she said. "It would be wrong if electricity were to become cheaper for households," said the politician, speaking in Bonn.

The environment minister believes that an electricity tax would only make sense if it could be developed into an energy tax. The economy as a whole should not be asked to pay up. Along with savings of the order of 3-4 billion German marks [DM], the new tax would have to yield "somewhat more" than the coal pfennig, which has been declared unconstitutional. The additional funds should be used to promote renewable forms of energy and electricity conservation. The amount of DM1 billion mentioned by Lower Saxony's Minister President Gerhard Schroeder, SPD [Social Democratic Party of Germany], for the year 1996 was described as realistic by Frau Merkel.

According to Frau Merkel, more attention should be accorded to final storage research in the future. Thus, whether the half life of radioactive material can be reduced through the transformation of elements has to be examined. Following talks with Schroeder on 17 January, Frau Merkel fiercely criticized the SPD politician. She accused him of using waste management as "security" for the resumption of the supra-party talks on a consensus on energy policy. The disposal issue is all the more pressing, because radioactive material would return to Germany from reprocessing in France in the summer.

Frau Merkel made it perfectly clear that the FRG could not do without nuclear energy over the next few years. Research, development, the construction of a new type of reactor with higher safety standards must be possible in Germany, she said. The environment minister said that she was in favor of talks on a consensus starting in February. Participation by the Greens in talks on a consensus was desirable, but not absolutely necessary. Even if the Greens did not participate, the CDU/CSU [Christian Democratic Union/Christian Social Union] would represent a broad social spectrum. If they wanted to behave in a politically responsible fashion,

they cannot "always play the role of Mr. Clean," said the CDU politician, referring to the Greens' continued demands for the abandonment of nuclear energy.

Following the talks between FDP Economics Minister Guenther Rexrodt and Schroeder, Alliance 90/Greens energy policy spokesman Michael Hustedt explained that the party would not participate in consensus talks the sole aim of which was "to improve conditions for nuclear energy."

Speaking to SUEDEDEUTSCHE ZEITUNG on 17 January, Frau Hustedt elaborated on that statement. She said that she expected a signal from the government indicating that it would distance itself from its plans for the expansion of

nuclear energy. If that does not occur, the Greens will not participate in the talks. She accused the government of backing the wrong horse. The energy industry itself is not concerned about acquiring new nuclear power plants, but about security with respect to investments. Frau Hustedt called on the suppliers of energy to persuade the government "to give up the wrong horse." Bonn should not pursue a particular policy just for the sake of saving face, she said.

An Economics Ministry spokesman said: "We assume that the Greens will participate." However, it is conceivable that they will not take part in the preliminary talks, but will join in at some later date. No final decisions have been made about who will take part in the talks.

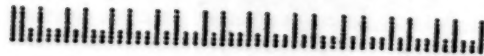
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